EASTERN RESEARCH GROUP, INC.

MEMORANDUM

TO: Fred Porter, U.S. Environmental Protection Agency

FROM: Christy Presson and Ruth Mead, Eastern Research Group

DATE: October 1, 1997

SUBJECT: Draft Summary of September 16-17, 1997 Industrial Combustion Coordinated Rulemaking Coordinating Committee Meeting

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1.0 INTRODUCTION AND PURPOSE OF MEETING

The September 16-17 meeting of the Coordinating Committee for the Industrial Combustion Coordinated Rulemaking (ICCR) project was the sixth meeting of the congressionally chartered Federal Advisory Committee Act (FACA) committee. The main purposes of the meeting were to discuss the results of the Information Collection Request (ICR), discuss concerns with the proposed NO_X NSPS proposal, discuss dioxins in terms of setting Coordinating Committee priorities, and to discuss issues and areas of concern presented by the Environmental Caucus associated with the ICCR. Other items of business were also discussed. A copy of the meeting agenda is included as attachment 1. A copy of the attendance list for the meeting is included as attachment 2.

The remainder of the meeting summary is organized in the following sections:

2.0 Selection of Stakeholder Co-Chair for Upcoming Fiscal Year

3.0 Membership Changes

4.0 Summary Updates of Various Issues

5.0 Non-Hazardous Solid Waste Definition Subgroup Status Report

6.0 Work Group Status Reports - Questions and Comments

7.0 Presentation by ICCR Tracking Subgroup

8.0 Report and Discussion on Information Collection Request (ICR) Responses, Inventory Database, and Emissions Data

9.0 Boiler Work Group Presentation on NO_X NSPS Proposal

10.0 Incinerator Work Group Presentation and Schedule Discussion

11.0 Dioxin Discussion and Guidance to Work Groups

12.0 Environmental Caucus Presentation and Discussion

13.0 Review and Discussion of Parking Lot Issues

14.0 Future Meetings

2.0 SELECTION OF STAKEHOLDER CO-CHAIR FOR UPCOMING FISCAL YEAR

2.1 Discussion

John Huyler of Keystone indicated that the Coordinating Committee members had received an e-mail requesting them to either re-nominate Rich Anderson, or to nominate themselves or another member as the Stakeholder Co-Chair for the upcoming fiscal year. Mr. Huyler indicated that they had received a good response to this request. One Coordinating Committee member re-nominated Rich Anderson as the Stakeholder Co-Chair for the upcoming fiscal year. Another Coordinating Committee member seconded this nomination.

2.2 Decisions

The Coordinating Committee reached a consensus decision to renominate Richard Anderson for another year as Stakeholder Co-Chair for the Coordinating Committee and Richard Anderson accepted this nomination.

3.0 MEMBERSHIP CHANGES

Fred Porter of EPA reported that the EPA has received and reviewed nominations for new members and alternates to several ICCR Work Groups. Additionally, requests to withdraw Work Group membership have been received. Nominations and withdrawals are listed for each Work Group as attachment 3. Mr. Porter had sent the Coordinating Committee members a list of

these membership changes with an earlier e-mail. The Coordinating Committee approved the nominations and withdrawals to the Work Groups. Fred Porter circulated a table showing the balance of representation in each of the Work Groups. A copy of this table is provided as attachment 4. He indicated that this table was based on membership and not attendance lists. Mr. Porter also pointed out that the Coordinating Committee and the Boiler Work Group were near the maximum number. One Work Group member indicated that according to this table, there will now be only three members of the Incinerator Work Group that represent state/local agencies and only one of those attends regularly. He suggested the group may want to find another State/local agency representative. Mr. Porter responded that some members have not been attending the meetings. He noted that the Committee might want to consider withdrawing membership for those members that have not been attending.

4.0 SUMMARY UPDATES OF VARIOUS ISSUES

4.1 Requests For Non-Members to Sit at the Table

Fred Porter indicated that the American Petroleum Institute (API) has requested that Lee Gilmer be allowed to sit at the table of the Coordinating Committee as a non-member to represent API's interests at this meeting because the API member and alternate unexpectedly could not attend the meeting. The Coordinating Committee approved this request. Also, during the second day of the meeting representatives of EER and of EPA/ORD will sit at the table to answer questions on the dioxin primer presentation and dioxin emissions.

4.2 Caucuses Associated with the Coordinating Committee

Fred Porter of EPA indicated that a state/local agency caucus has been formed in association with the ICCR. There are now three caucus groups associated with the ICCR. These are a State/local agency caucus, a small entity caucus and an environmental caucus.
Mr. Porter pointed out that these caucuses allow stakeholders of like concerns to coordinate their actions within the ICCR process.

4.3 Ground Rules for Guidance from EPA Staff to Coordinating Committee Members

Fred Porter of EPA discussed the role of EPA in providing advice and guidance to ICCR participants. He indicated that EPA has offered feedback and guidance as EPA staff, when requested, to help other Coordinating Committee Members meet their objectives. He also indicated that when advice is received from EPA staff, this does not mean that EPA agrees with the objectives or positions of these members. Mr. Porter discussed the following ground rules for handling any written materials given to EPA. When a Committee or Work Group member gives EPA staff draft materials to look at for the purpose of providing advice, EPA will not keep such materials. EPA will generally return the materials during the same meeting. If a member gives EPA staff something that is intended to influence the ICCR process then those materials will become public information.

4.4 Circumvention of the ICCR Process

Mr. Porter indicated that EPA management is concerned with any member of the Committee or Work Groups going directly to another part of EPA to try to influence the process. EPA management feels that this is destructive to the ICCR process. The EPA Co-chairs on the Coordinating Committee and Work Groups are the official EPA contacts for the ICCR and represent the agency as a whole. One Coordinating Committee member asked how to handle the issue of going to other EPA resources for information not for advocation of ideas. Fred Porter of EPA responded that a member requesting assistance from EPA should first go to the EPA Co-chair of the ICCR Coordinating Committee or Work Group to get the contact and information. They will coordinate with EPA.

4.5 ICCR Budget

Fred Porter of EPA indicated that the ICCR process is on budget for the 1997 fiscal year. He also indicated that next year's overall EPA budget has been approved but that the agency allocation is an on-going process. He indicated that the ICCR has requested a budget that is somewhat greater than the 1997 fiscal year budget.

4.6 Satisfaction Survey

Fred Porter of EPA circulated a Satisfaction Survey to all of the Coordinating Committee members. This survey will also be circulated at the Work Group level. He asked that Committee

members think about the entire year and the overall ICCR process when reviewing the survey. He would like the Coordinating Committee members to complete these surveys and have them placed in the mail by September 30th. Fred Porter also indicated that there was time blocked off the week of October 14 through October 17 for stakeholder interests groups to provide feedback to EPA on the ICCR process in addition to the Satisfaction Survey. There are eight one-hour slots available and any stakeholder interest group should contact Fred Porter if interested in this opportunity.

5.0 NON-HAZARDOUS SOLID WASTE DEFINITION SUBGROUP REPORT

Dick VanFrank, a Coordinating Committee member, reported that the Non-Hazardous Solid Waste Definition Subgroup had one conference call and one face-to-face meeting since that last Coordinating Committee meeting. He also indicated that the subgroup would be meeting after this Coordinating Committee meeting to discuss the comparable fuels issue and that the Coordinating Committee can expect a full report and recommendations at the November Coordinating Committee meeting. He explained that the comparable fuels approach considered all fuels a waste initially and then these fuels are systematically exempted from being a waste after further consideration. Leslye Fraser of EPA Office of General Counsel (OGC) pointed out that there were separate call-outs for traditional commercial fuels. The Non-Hazardous Solid Waste Definition Subgroup decided to document the process with full minutes and flash minutes that are posted to the TTN, so that others can follow the process. All the meetings of this subgroup are open to the public.

6.0 DISCUSSION OF WORK GROUP STATUS REPORTS

The Coordinating Committee was asked to voice any comments or questions related to the Work Group Status Reports that were posted to the TTN one week before the meeting. Copies of these status reports are provided as attachment 5. There was a comment from a Coordinating Committee member that the Economics Analysis Work Group had a meeting

scheduled for October 7th. Fred Porter of EPA pointed out that the second paragraph of the Incinerator Work Group status report indicates that the Work Group hopes the Coordinating Committee can schedule a meeting in August at which the Work Group can discuss the regulatory alternatives paper and receive feedback from the Committee. There were no comments or questions by the Committee members or the audience on any of the other Work Group status reports.

7.0 PRESENTATION BY ICCR TRACKING SUBGROUP

7.1 Presentation

During the May 20-21 Coordinating Committee meeting, the Committee requested that a subgroup form to serve as a tracking group that would compile a list of all the Coordinating Committee and Work Group subgroups and ad-hoc groups. John Paul, a Coordinating Committee member and a member of the tracking subgroup, gave an update of the tracking subgroup's activities. The subgroup had previously outlined the objectives, activities and time line for each subgroup and organized this information into a table that was posted to the TTN prior to the July Coordinating Committee meeting. John Paul and the other members of the subgroup proposed that the Coordinating Committee establish a permanent milestone tracking subgroup. He indicated that this subgroup would be a non-recommending subgroup and its purpose would be purely to track the activities of the various Coordinating Committee and Work Group subgroups. All current members of the subgroup indicated they were willing to serve on the permanent subgroup as well.

7.2 Discussion

There was some discussion among the Coordinating Committee members in regard to the format of the proposed Milestone Tracking Subgroup's report formats. One Coordinating Committee member suggested that the subgroup might want to include a reference milestone schedule (such as in the ICCR document) as a part of the report so that this can be compared to the current progress of the various subgroups. An API representative supported such a subgroup and indicated that Miriam Lev-On might be interested in participating in the subgroup. He said it

was important for all the subgroups to keep sight of the whole process and prioritize the important activities needed to keep on schedule. Various members of the proposed Milestone Tracking Subgroup emphasized that the subgroup would only present information to the Coordinating Committee for their comment and recommendations and that the subgroup was not proposing to direct Work Groups, make recommendations, or create new information. One Coordinating Committee member suggested requesting Work Groups for more information on active tasks within the Work Group and an indication of where those tasks fit into the major regulatory milestones.

7.3 Decisions

The Coordinating Committee reached consensus that the Milestone Tracking Subgroup be formed as a non-recommending group and that the current members will remain on the subgroup. Any additional Coordinating Committee members wishing to participate should contact one of the subgroup members. Any member of the Committee who has suggestions on the format of the subgroup reports should forward these to John Paul or another member of the Milestone Tracking Subgroup. The Milestone Tracking Subgroup will provide an updated version of the tracking report by the next Coordinating Committee meeting.

8.0 REPORT AND DISCUSSION ON INFORMATION COLLECTION REQUEST (ICR) RESPONSES, INVENTORY DATABASE, AND EMISSIONS DATA

8.1 Presentation on ICR Responses

Mae Thomas, of Eastern Research Group (ERG), presented information on the responses received from the ICCR Information Collection Request. The overheads used in this presentation are provided as attachment 6. The ICR was mailed to facilities that the ICCR Inventory database listed as having a boiler, process heater, or incinerator combusting non-fossil fuels or wastes of interest. Ms. Thomas reviewed the number of surveys that were mailed, the number returned and the breakdown of the number of facilities that completed only Part 1 versus the number that completed Part 1, 2 and 3 of the survey. Part 1 included general facility contact information. Part 2 had detailed information on combustion units firing non-fossil materials. Part 3 provided economic information and was completed if part 2 was completed. In general, fewer part 2's were

returned than initially expected. The presentation also reviewed a phone survey that was done to get additional insight into the reasons facilities returned only part 1's and how the part 1 responses are distributed over the various fuel/waste categories. From the survey and other available information, it appears that the majority of facilities that did not return part 2's met the exemption criteria in the ICR or had another valid reason, such as the unit shut down. Only about 20% of those called appear to have misunderstood the directions. Part 2 and 3 data have been received on about 5000 units, representing all industries and fuel/waste categories to which the survey was distributed.

8.1.1 Discussion

After the presentation, Fred Porter of EPA indicated that EPA feels that the ICCR got what was needed out of the survey and the survey responses provide the information necessary to move forward. Another Coordinating Committee member pointed out that the survey response provides much better data on 5000 combustion units. One Coordinating Committee member asked if there will be any follow-up for those facilities that were identified as incorrectly interpreting the survey or that were returned with incorrect addresses. Fred Porter of EPA said there were no immediate plans for follow-up and stressed that the focus should be on the data that has already been received. Another Coordinating Committee member said that there should be follow-up on the surveys that have not been returned. He suggested that an assessment should be made of whether the non-respondents tend to be smaller facilities or particular types of facilities. There was concern expressed about the representativeness of the database, especially for the smaller units and the units in the fuel waste codes that have high variability such as ‘waste oil’ and ‘other’. This member also suggested that the original ICR ad-hoc group should be re-formed to discuss the survey response versus the initial objectives to determine if they felt the survey was successful. One Coordinating Committee member asked if the survey responses raised questions about the accuracy of the AIRS/OTAG databases. Fred Porter of EPA indicated that to an extent it does raise questions on accuracy, but he reminded the members that the database is simply supposed to be representative in nature. A member pointed out that states are not notified when units are shut down, so it was not a surprise that many of the units in the database had been shut down. Another Committee member said the Work Groups should look at the ICR data that has

come in on a subcategory basis and decide whether there is enough information to represent the given population.

8.2 Presentation on Waste Burning Inferences

Mae Thomas of ERG and Fred Porter of EPA discussed some of the inferences that could be made based on the ICR responses. She noted that many of the units were known to have shut down. Most notable of these units that have been shut down are MSW incinerators and food store incinerators. She pointed out that there has been restructuring in industries, especially the petroleum industry, that would also account for many of the shutdowns. Mae Thomas and Fred Porter also commented that recycling programs have most likely impacted the amount of waste burning being done. The overheads used in this presentation are available as attachment 6.

8.2.1 Discussion

Rich Anderson, the Coordinating Committee stakeholder co-chair, pointed out that for pathological waste the preferred method of disposal is now autoclave. He also mentioned other factors that would affect the amount of waste burning such as: cardboard recycling, the effect of the Title V permit program on sources, a shift from combustion to land disposal and the amount of cost upgrading necessary to meet regulations. Another Coordinating Committee member raised the question of whether waste that used to be combusted in smaller units is now aggregating into a waste stream for larger units. The response from another member suggested that this probably is a factor to some extent. A member also wanted to know whether the survey had defined shut downs. It was pointed out that if the units were still on-site and could be used at any time, they should be considered in the ICCR process.

8.3 Presentation on ICR and Inventory Database Release Schedules and Possible Merging of the Databases

Ruth Mead, of Eastern Research Group, reviewed the plan for releasing the next version of the ICCR Inventory Database and the ICR database. The overheads for this presentation are provided as attachment 7. The new version of the ICCR Inventory database (Version 3.0) will incorporate new data from Louisiana and DOD, all submitted Work Group changes and changes for database consistency. The first release of the of ICCR Inventory Version 3.0 is scheduled for mid-December. The ICR survey database will be released separately. The first version will be

released October 15. At the November Coordinating Committee meeting, EPA would like the Committee to discuss guidance for the Work Groups on review of this database. A revised version of the ICR survey database incorporating QA and Work Group review comments is scheduled for February 1998.

Fred Porter, of EPA, discussed preliminary thoughts on the issue of merging the ICR database with the Inventory database. The overheads used for this presentation are provided as attachment 7. Mr. Porter indicated that EPA will consider merging the ICR data with the Inventory database in the future. He indicated that the benefits of merging need to be weighed against the level of effort necessary to do the merge. He also indicated that several stakeholders have suggested not merging the two databases. The level of effort to merge the data would be significant for the following reasons: the units do not have common ID numbers and the ICR database does not have complete SCCs. Mr. Porter indicated that EPA might have a recommendation on this topic at the November Coordinating Committee meeting.

8.3.1 Discussion

One Coordinating Committee member was in favor of not merging the ICR data with the ICCR Inventory database. He suggested that the ICR data should be kept pristine because it is better quality, more recent, more detailed data. This member also wanted to know if there would be additional follow-up to get a better estimate of the total population of units. A Coordinating Committee member said that the environmental caucus is interested in getting the geographical location distribution of the units. This member indicated that because there is a common facility ID between the Inventory database and the ICR data, a targeted merge of at least the facility locations would be of value to the environmental caucus and probably to the economics Work Group as well. A Committee member expressed concern about not merging the databases because, especially in the Incinerator Work Group, it will be difficult to determine what units are still in existence and what units have been overlooked because of the number of unit shut downs indicated in the ICR data.

A Committee member was concerned with the overall coordination of the process and how this relates to the databases. This member indicated that according to the presented database time line, an updated version of the Inventory database will not be available in time to develop

MACT floor recommendations. Fred Porter of EPA responded to this comment by saying that the Work Groups need to go forward with the information currently available. When additional data become available, the Groups can check whether their preliminary findings are confirmed or need to be adjusted. MACT floor and MACT development is typically an iterative process.

8.4 Presentation on HAPs Emissions Data

Fred Porter, of EPA, presented some of the survey response information regarding HAP emission data availability. He reviewed the questions on the ICR referring to HAP test data and provided the estimated number of facilities that indicated that they had HAP emissions test data. Mr. Porter pointed out that because of the very high number of facilities that indicated they had HAP data, some of these responses are probably misleading. Mr. Porter said that some facilities might have checked 'yes' if they had any stack test regardless of whether is was a test for HAPs or just criteria pollutants. He indicated that additional follow-up to these responses would be time-consuming and costly. He also explained that the current available HAP emission data in the current Emissions database came from the Source Test Information Retrieval System (STIRS). Mr. Porter reviewed the history of the STIRS data and pointed out that at the July meeting of the Coordinating Committee, two states indicated that they had more current HAP emissions test data available. Mr. Porter indicated that a "targeted" effort to obtain the test data not in STIRS would be resource intensive. He indicated that no decisions on the HAP emissions data subject have been made.

8.4.1 Discussion

A Coordinating Committee member pointed out that the ICR had a more detailed question in part 2 that requested the specific HAPs that had been tested. The member said that this information would be helpful for the Work Groups in determining where the test data responses should be followed-up. This member said the Committee should direct the Work Groups to review the test data availability portion of the ICR part 2 responses and determine how and what additional data to request. Another Coordinating Committee member said that it was not worth an extensive follow-up to find out that facilities misunderstood the question. This member suggested doing a limited follow-up on the part 1's to find if facilities actually misunderstood the question. As an example, another Committee member indicated that when reviewing the survey

responses from the seven facilities in his company that received the survey, six of them had misunderstood the question regarding HAP test data. Two Coordinating Committee members said that the Work Groups should follow up on the ICR HAP responses because if even one additional test is identified, this saves money on additional testing. One Coordinating Committee member wanted to know if criteria pollutants would be looked at in relation to HAPs emissions. Another member suggested that the STIRS data could be looked at again to get additional information on criteria pollutants. Another Coordinating Committee member made the comment that a problem with the test data that he had looked at was that the emission rates were across a very wide range and that additional testing would be necessary to determine which part of this range was correct.

A Coordinating Committee member commented that he thought the main purpose of the ICR was to collect additional HAP emissions test data. Fred Porter of EPA responded that the primary purpose of the survey was to find out more about types of units and types of non-fossil materials being burned, and that the question about HAP data was added later. A representative of API indicated that an API effort is collecting additional tests and this will bring more data into the ICCR process.

8.5 Public Comment on ICR Database Presentations

Sam Clowney, of Tennessee Gas & Pipeline and a member of the Internal Combustion Engine Work Group, said that there is a need for more emissions test data. He said that the IC Engine Work Group has taken all of the engine tests from STIRS and there are only a handful of units that have sufficient process and design information to put the test results in perspective. He expects future state data to have the same weaknesses. The commentor expressed a desire to take the limited resources and use them to do field tests for those units that the Work Group identifies as needing additional data.

Beth Berglund, of Merck and the Pharmaceutical Manufacturer's Association, said that she would agree with not merging the ICR data and the Inventory database. She requested that there be some indication when information in the Inventory database came from a trade association or was provided directly from the source. She said this information should be distinguished as being different and probably more accurate than other data in the Inventory

database. Fred Porter of EPA responded that there is already a Source Code in the Inventory database that can be used to track where information originated. He also indicated that as part of Version 3.0 of the Inventory database, there will be additional fields for indicating what change or addition was made and where that change came from.

Mike Fisher, of the American Plastics Council and a member of the Boiler Work Group, commented on the presentation of inferences on waste burning in the country. He said that another inference that can be made from the ICR response is that although the population of the U.S. has increased and thus the amount of goods and products has increased, the per capita production of waste has decreased. He attributed this reduction to waste minimization and reusable products. He said this source reduction should also be considered as a factor in the amount of waste burning unit shutdowns.

David Marrack, of the Galveston-Houston Association for Smog Prevention and a member of the Boiler Work Group and Incinerator Work Group, commented that MSW and medical waste are now going to landfills instead of being burned. He said that this is only increasing the air pollution from landfill emissions instead of from combustion units.

Don Price, of Ventura County Air Pollution Control District and a member of the Internal Combustion Engine Work Group, suggested going back to the emissions tests currently available and trying to obtain the process information on those tests from the source or State agency. He said many of the emissions tests do not include the manufacturer, model number, and fuels used, but this information might be available through local personnel. A Coordinating Committee member responded that the Turbine Work Group had filled in some information in this manner. It allowed them to use more of the STIRS tests, but about half of the tests still have insufficient information.

Jane Williams, of the California Communities Against Air Toxics and a member of the Process Heater Work Group, commented that some the California HAP test data has gotten better since the 1994 STIRS effort and that this data is probably useful to go back and get. She pointed out that there were three tiers to the California test data effort and that, in 1994, only the first tier was complete. The other two tiers are now probably completed.

8.6 Decisions and Guidance to Work Groups

There was agreement among the Coordinating Committee that the ICR data should be given to the Work Groups as soon as possible (i.e. on October 15) because the Work Groups will be primarily responsible for looking at the content of this data. The Committee also directed the Work Groups to move forward with available data.

The subgroup that developed the ICR form and survey strategy met during a break. They recommended that the Work Groups review the responses to the test data availability portion of the Part 2 to determine which additional emission data should be requested and report back to the Coordinating Committee at the November meeting. The Committee agreed to provide this guidance to the Work Groups.

9.0 BOILER WORK GROUP PRESENTATION ON NO_X NSPS PROPOSAL

9.1 Presentation

Jim Stumbar and Alex Johnson, members of the Coordinating Committee and Boiler Work Group, presented differing views from the Boiler Work Group on the issue of the proposed NO_X New Source Performance Standard (NSPS) and its effect on the ICCR process. The paper outlining this presentation is provided as attachment 8. The Boiler Work Group was split on whether or not to request the industrial boiler section of the NO_X NSPS be withdrawn and brought into the ICCR process.

The Work Group members that believe the NSPS should not be part of the ICCR process made the following points: the NO_X NSPS is an on-going process with a court-ordered date; the Work Group already has a lot of work to do and does not need to address comments and issues on the NOx as well; the proposed NO_X NSPS is a good rule with a an output-based format which promotes energy efficiency and pollution prevention; the EPA has already performed sufficient analysis to determine the effect of NO_X controls on other pollutants; the EPA has already done adequate cost analysis; finally, the NO_X NSPS can be used by the ICCR Boiler Work Group as a NO_X benchmark to the work already being done.

The Work Group members that said the NSPS should be part of the ICCR process made the following points: the purpose of the ICCR was coordination and the NO_X NSPS should be part of this coordination to avoid any future changes to the NSPS; some provisions of the NO_X NSPS could conflict with the ICCR development methodology (i.e. definition differences); having the NO_X NSPS and the ICCR separate might result in inconsistent control requirements; finally, the allocations of NO_X show 90% of the total emissions are from utilities and only 10% from industrial boilers, so delaying the industrial boiler portion to allow coordination with ICCR would not greatly diminish the NO_X NSPS emission reduction.

The Boiler Work Group suggested that the differing Work Group views be forwarded from the Coordinating Committee to EPA directly or through a public comment from the Committee during the NO_X NSPS public comment period.

9.2 Discussion

Todd Barker, of Keystone, outlined the procedures when consensus in the Work Group is not reached. The issue is then elevated to the Coordinating Committee for discussion. The Coordinating Committee can give guidance on the issue and send it back to the Work Group or the co-chairs can elevate the discussion to EPA management. A Committee member pointed out that in the ICCR document it is noted in Table 1 that the NO_X NSPS revisions were being done. One Coordinating Committee member pointed out that the Committee needed to be realistic about the possibility of being successful in bringing the industrial boiler section of the proposed NO_X NSPS into the ICCR. This member said that in order to do this, the litigants would have to be convinced that it was correct to do so. This seems unlikely. Another Coordinating Committee member noted that the comment period for the proposed NO_X NSPS was extended until October 8, 1997.

9.3 Public Comment on Boiler Presentation on NO_X NSPS Proposal

Bob Bessette, of CIBO and a member of the Boiler Work Group, commented that there were a lot of commercial and ideological interests at stake with the proposed NO_X NSPS issue. He would like to see it as part of the ICCR process but at this point, he would not suggest pushing to resolve the issue in this forum.

9.4 Decisions

The Coordinating Committee reached consensus on the following proposal put forward during the discussion:

- The Coordinating Committee will table the Boiler Work Group recommendations that the proposal on NO_X NSPS should be forwarded to EPA management.
- The divergent views should be recorded in the Coordinating Committee meeting minutes for future reference.
- Stakeholders that feel strongly about the inclusion of the proposed NO_X NSPS in the ICCR process should comment directly during the proposed NO_X NSPS comment period.
- The Coordinating Committee will table any further discussion of this issue.

10.0 INCINERATOR WORK GROUP PRESENTATION AND SCHEDULE DISCUSSION

10.1 Presentation

Norm Morrow, a member of the Coordinating Committee and the Incinerator Work Group, presented the report the Incinerator Work Group had prepared. This Incinerator Work Group Status Report is provided with other Work Group Status Reports as attachment 5. One of the main purposes of the presentation was to get consensus on the format of the table in the report that outlines the Incinerator Work Group's potential subcategories and upcoming milestones. Mr. Morrow also pointed out that as part of the Industrial-Commercial Waste Incineration (ICWI) consent decree, the Incinerator Work Group will need to get consensus from the Coordinating Committee on an ICWI Regulatory Alternatives Paper at the September 1998 Coordinating Committee meeting. He also mentioned that there will be boilers and process heaters that are burning fuels that fall under the ICWI definition and these Work Groups will have to give input on this regulatory alternatives paper.

10.2 Discussion

Fred Porter of EPA noted that the report presented by the Incinerator Work Group was directly in line with the type of format comments made by other Coordinating Committee members regarding what they wanted to see in the reports from the Milestone Tracking

Subgroup. Many Coordinating Committee members suggested that all Work Group Status Reports should include this type of schedule with specific milestones. Mr. Porter went on to point out that in order to promulgate the ICCR by November of 2000, based on his experience the rule should be proposed by November of 1999. It also takes approximately a year to draft a regulation which means the target for the Work Groups and Coordinating Committee to have recommendations for regulatory alternatives and MACT would be November of 1998.

One Coordinating Committee member asked if EPA could provide a detailed timeline of regulatory milestones. Mr. Porter said that the timeline in Table 4, pages 69-74, in the ICCR document is the most detailed timeline EPA could provide. One Committee member said that if the Coordinating Committee wants a specific summary table or timeline, then it needs to give the Work Groups specific guidance. A Coordinating Committee member requested that the Coordinating Committee direct the Work Groups to review the ICCR document schedule and determine how they are going to comply with that schedule. A Committee member reminded the Coordinating Committee that they need to help the Work Groups achieve the schedule and not create delay. He noted that several Work Groups brought forward recommendations at the July meeting and the Committee was highly critical and did not reach decisions. The Committee needs to establish priorities and develop recommendations in a timely manner.

A Committee member pointed out that the Subgroups need to keep in mind that the Economic Analysis Work Group needs input from the other Work Groups to do its analysis. Another Coordinating Committee member requested that if the Economic Analysis Work Group needs specific input from other Work Groups that the Economic Analysis Work Group needs to provide further clarification on what type of information is needed.

10.3 Decisions and Guidance to Work Groups

The Coordinating Committee decided to request the Work Groups to review the schedule in the ICCR document prior to the November Coordinating Committee meeting and be prepared to give this update to the Milestone Tracking Subgroup by October 28 so the subgroup can compile this information for the November Coordinating Committee meeting. The Milestone Tracking Subgroup will look at the detailed schedule in the ICCR document and pick major milestones and the ICCR projected date. The Subgroup will develop a summary of these dates

be given to the Work Groups in early October to be completed by the October 28 date. The table will then be compiled and posted to the TTN for discussion at the November Coordinating

October 1.

11.0

The committee discussed issues related to dioxin formation and emissions and how to use dioxin information in the ICCR process. Many members of the committee and the audience had

The overhead slides from the primer are posted on the TTN Coordinating Committee board in the "miscellaneous download" area. Steve Lanier of EER and Jim Kilgroe of EPA/ORD sat at the

11.1 Questions

parameters and criteria pollutants. Steve Linear responded that once you have a crew and equipment in the field to measure dioxins, measuring outlet criteria pollutants is only a small

that are already being monitored by the plant for purposes of process control. These could be measured within the $40,000 to $60,000 cost for a dioxin test quoted during the primer. He

probably need additional personnel on site. Jim Kilgroe commented that $40,000 to $60,000 is sufficient for a compliance test. However, if you are conducting research to test dioxins at a

organics, the tests can cost $350,000 to over $1 million, based on previous EPA research experience. Measuring additional organic compounds could increase costs, although an on-line

assurance/quality control (QA/QC).

Another committee member state that if HAP tests are done for ICCR, we would likely test multiple HAPs and need a semi-volatile train, a metals train, a VOC train, and moderately high QA/QC. We may want to do one or two tests with many HAPs, and then do subsequent tests with fewer pollutants that appear to be the most significant ones. Steve Lanier said that he conducted a test to quantify the entire spectrum of organics from a hazardous waste combustor with triplicate measurements and the cost was between $300,000 and $400,000. Jim Kilgroe suggested that the ICCR could use past knowledge to determine which pollutants to test.

A member asked if there is a difference of opinion on the priority of dioxin emissions testing for wood-fired units. Jim Kilgroe, Steve Linear, and others noted that dioxin emissions from wood will vary depending on factors such as whether the wood is treated, the moisture content, the sulfur content, and combustion conditions. Jim Kilgroe added that ORD has some unpublished test data indicating that wood treated with pentachlorophenol has higher emissions, but he is not sure which factors cause this result. Steve Linear added that there is some data from England showing that, depending on the overfire air system, chipped wood combustion can have high particle entrainment which increases dioxin emissions. If the combustor is modified, emissions are reduced. Mr. Kilgroe and Mr. Linear agreed that wood combustion has a potential for higher dioxin emissions, but it depends on how the combustor is designed and operated and what kind of air pollution control devices are present. For example, a hot-side ESP increases secondary formation of dioxins. Jim Kilgroe offered that for wood combustion, dioxins can range from a fraction of a nanogram per dry standard cubic meter (ng/dscm) up to approximately 100 ng/dscm, whereas, municipal waste combustor (MCW) data can range from a fraction of a ng/dscm up to a few thousand ng/dscm.

A committee member asked whether MACT standards of 30 or 60 ng/dscm for existing units and 12 ng/dscm for new units, which are the levels in the recent MWC standards, are achievable for all combustors. Jim Kilgroe responded that by using good combustion practices (GCP) and a spray dryer followed by a good PM control device these levels are achievable. Steve Lanier commented that retrofit situations are more difficult than new units, because of site-specific variation.

A committee member stated that GCP for MWCs generally includes a CO level of about 100 ppm, and asked if this would be true for other types of combustors. Jim Kilgroe responded that the MWCs, the CO limits range from 50 to 250 ppm depending on combustor design. Generally, for an individual combustor, as CO emissions increase above about 200 ppm, dioxin emissions also increase. If CO is below 100 to 200 ppm, the correlation with dioxin emissions breaks down. Dioxin emissions are related to how much gas phase organics remain after combustion. GCP (indicated by CO levels below 100 or 200 ppm) ensures that low organic levels remain; then, dioxin emission levels will depend on the amount of carbon in the ash and the amount of ash. A member commented that the hazardous waste slides in the dioxin primer did not clearly show the correlation between CO and dioxin. Jim noted that this slide combined data from multiple units of different designs. Different designs will have different CO levels. But for an individual combustor if CO increases above the GCP level dioxins also increase.

A committee member asked if analysis of the nitrogen or hydrogen content of fuels shows a relationship to dioxin emissions. Jim Kilgroe replied that they have not done an analysis, but he does not know of information that would support such a correlation. There can be large variations in the ranges of each, without apparent effects on dioxins.

A committee member said he was aware of that mobile diesels are a significant contributor to dioxins in the environment and asked if Mr. Kilgroe and Mr. Lanier agreed. Jim Kilgroe stated that Brian Gullett of EPA/ORD recently did a study. While emissions from individual diesel sources are low relative to incinerators, there are a large number of diesels, so overall they may contribute moderately to national dioxins levels. Mr. Lanier noted that newer studies of diesels seem to be getting lower dioxin results than older studies of tunnels. It was noted that vehicle age, design, and driving conditions may influence emissions.

11.2 Discussion

John Huyler facilitated a discussion on what the dioxin primer information means for the ICCR process, with the goal of trying to provide Coordinating Committee guidance to the Work Groups.

An environmental organization representative commented that the real goal of the ICCR is to protect human health. Dioxin is bioaccumulative, the science of health effects is not well

understood, and sensitive subpopulations should be considered. Small amounts of emissions can have significant health effects. While the Work Groups and Coordinating Committee may need to

willing to simply accept the list of test priorities on the last page of the dioxin primer without looking at other data that are available. Another committee member stated that the committee

made the presentation have researched dioxin for years and the ICCR has limited resources and time.

not directly related to dioxins and that scientists cannot accurately predict dioxin emissions. He suggested that Work Groups should identify data gaps and should seek the European data

if EPA and an expert contractor rather than the Work Groups could examine specific ICCR combustor designs and characteristics that lead to dioxin formation and assess the European data.

the ICCR would need to precisely define the scope of the study, specific questions to be answered, specific outputs, and the level of certainty desired. Given the regulatory schedule, we

need to move forward with readily available information. Two other committee members responded that they would like to see emissions data analyses and discussions on testing priorities

the ICCR document and organizational structure.

A State agency representative suggested that Work Groups should identify GCP for their

parameters indicating GCP (such as O , CO, and temperature) should be required for large sources and periodic monitoring for small sources. Other members said they felt uncomfortable with directing Work Groups to require specific parameter monitoring, and recommended that the

that to develop GCP for MWC's, they identified seven criteria that lead to good combustion, such

as uniformity of feed, good mixing, downstream flue gas temperature, etc. They then selected appropriate operating parameters for demonstrating compliance with GCP. These parameters were CO, load level, and flue gas temperature. This type of assessment could be done for ICCR sources, but can take time. A member reminded the group that fine particulate control is also important for minimizing dioxin emissions.

One member suggested that the Coordinating Committee provide guidance to the Work Groups, such as; (1) Work Group should determine GCP, including operating practices, for each source category and subcategory; (2) Work Groups should be responsible for understanding their unit designs and the likely impact of dioxin emissions; and (3) Work Groups should consider secondary formation of dioxins downstream of the combustor. They should determine controls that can be used to reduce dioxin emissions and their efficiency.

Work Groups will need to understand the relationship between CO and dioxin, PM and dioxin, etc., for their source category to accomplish the above three items. Some other committee members indicated general agreement with these points. Some also suggested that all of the information in the dioxin primer is useful to Work Groups and they should be directed to consider it.

One member asked if the Committee could recommend that boilers, IC engines, and turbines firing natural gas not be a priority based on the dioxins primer presentation. Two other members agreed with this suggestion. One commented that we don't have dioxin data on IC engines, and that even if we started now, we would not have time to test all types of sources within the ICCR regulatory development schedule. Therefore, if something is a low priority, we should decide now not to test it. Another member disagreed, stating that dioxin is a great concern in the Great Lakes area and the region is committed to virtually eliminating dioxin emissions. This means addressing the small, as well as large dioxin sources. He further stated that the ICCR should not dismiss a source without testing to demonstrate that emissions are low.

Another committee member stated that he views the recommendations on the last page of the dioxin primer as a good starting point but not necessarily the ending point. The presentation can be used to help set priorities. There are a lot of pollutants in addition to dioxin to consider. He recommended that Work Groups consider their various sources and pollutants and develop

priority pollutant lists and test plans. Jim Kilgroe noted that dioxin may be a good surrogate for control device effectiveness in reducing emissions of other semi-volatile organic pollutants. A committee member added that PAHs could be a good surrogate for dioxins.

Steve Lanier cautioned the committee to use EPA's expertise in MACT floor determination. The variability of the dioxin data and lack of data will make this process difficult. The uncertainty of the data should be considered when developing recommendations for emission standards.

11.3 Public Comment

Ruth Mahr, an environmental organization representative on the Incinerator Work Group, urged the group to consider that dioxin is very toxic, bioaccumulative, and causes a range of health effects. In addition to economic efficiency, the Coordinating Committee should consider moral, ethical, and legal efficiency. She stated that regulation and research go hand-in-hand. She believed that more data are needed to fill gaps and address uncertainties and suggested that the Coordinating Committee should recommend that EPA spend more money on testing. She also suggested a focus on reducing production of dioxin in total, rather than simply using controls that transfer dioxin from the air to the ash. She urged Work Groups to focus on pollution prevention.

David Marrack, an environmental representative and Work Group member, commented that when you reduce dioxins, you also reduce hydrogen chloride and PAHs. He commented that for chlorinated fuels there are recognized ways available to reduce dioxins. He presented an overhead slide showing low dioxin levels measured at four combustors on four continents (see attachment 9). He noted that in addition to low dioxin levels, combustors can also achieve low mercury levels. He also stated that in his understanding, the MACT floor is based on history, whereas, the MACT standard can consider new information and new technologies.

11.4 Guidance To Work Groups

The Coordinating Committee, by concurrence, requested the Work Groups to consider the content of the dioxin primer presentation in their deliberations; and when applicable, that consideration be given to GCP including pollution prevention, control device efficiencies, and surrogate pollutant levels in addition to existing data sets.

12.0 ENVIRONMENTAL CAUCUS PRESENTATION AND DISCUSSION

12.1 Presentation

Keith Harley reported that the environment caucus has met three or four times. The caucus is composed of the environmental organization and environmental justice representatives on the Coordinating Committee and Work Groups. The purpose is to act in a coordinated and proactive fashion in providing input for the ICCR process. In the caucus they have identified three priority issues that need to be addressed during the ICCR process:

- environmental justice,
- public participation, and
- pollution prevention.

A paper on these topics was posted on the TTN and handed out at the meeting (see attachment 10). Mr. Harley noted that the paper contained language and requirements from executive orders, statutes, regulations, and Federal Register notices. It does not contain environmental caucus opinions. Mr. Harley walked through the main points of the environmental justice and public participation sections of the paper. He requested Coordinating Committee members to consider the information presented and forward ideas to him on how the ICCR can address environmental justice and public participation. He will then craft a proposal for the next Coordinating Committee meeting.

Alex Johnson reported that the environmental caucus sees pollution prevention as an important opportunity in the ICCR. He walked through the section of the paper on pollution prevention. He then offered two observations on the ICCR:

- The ICCR cannot be successful without a thorough consideration of pollution prevention practices and opportunities, and
- To date, neither the Work Groups nor the Coordinating Committee have devoted sufficient attention to ensure that pollution prevention is part of the activities.

Mr. Johnson then presented the following draft proposal for incorporating pollution prevention to the ICCR, which the environmental caucus suggested the Coordinating Committee should endorse:

> The Coordinating Committee reaffirms that promotion of pollution prevention is a fundamental and necessary objective of the ICCR process. The CC also recommends the following steps be taken to incorporate pollution prevention into ICCR activities:
>
> - At a minimum, workgroups should identify measures, processes, methods, systems and techniques which reduce emissions through process changes, substitution of materials, or other modification.
> - Workgroups should identify and recruit the resources and expertise necessary to characterize and quantify process changes, substitution of materials or other modifications applicable to their facilities.
> - Pollution prevention assessments should be detailed in workgroup tracking reports.
> - Process changes, substitution of materials or other modifications must be evaluated prior to determining MACT floors.

He asked the Coordinating Committee members to provide input on this proposal with the goal of reaching consensus on Coordinating Committee guidance concerning pollution prevention.

12.2 Discussion

Several members thanked the environmental caucus for raising some important issues and pulling together relevant executive order, statutory, and regulatory language on environmental justice and pollution prevention.

One member pointed out that there are additional executive orders and acts the ICCR will need to address, including the Children's Health Executive Order, the Small Business Regulatory Enforcement Fairness Act (SBREFA), and unfunded mandates. He suggested that while the ICCR must address all of these orders and acts, there may not be time to deal with all of them in detail. The Coordinating Committee should, therefore, decide where to focus the most effort.

Leslye Fraser of EPA/OGC stated that EPA is required to implement the Clean Air Act but must also fulfill the mandates of the other acts and executive orders. The final regulatory recommendations must consider these acts and orders, because if the questions and requirements they raise are not addressed, the regulatory recommendations cannot get through. She noted that Carol Browner is involved in task forces to implement some of the executive orders, and EPA takes them seriously. A member of the environmental caucus said that they are also interested in executive orders and other initiatives, such as children health and urban air toxics, not discussed today. They plan to provide input on these at future meetings.

While many committee members expressed support for the overall goals of pollution prevention, several of these had comments or concerns with the specific proposal put forward by the environmental caucus. Regarding the fourth point, two members stated that the ICCR members cannot really identify pollution prevention options until the subcategories are more clearly defined, because pollution prevention tends to be very process-specific. There was also concern that the schedule calls for preliminary MACT floor determination in the next couple of months, and there is insufficient time to collect additional information on pollution prevention practices before the floor determination. Leslye Fraser of EPA/OGC replied that the MACT floor and MACT determinations are dynamic and iterative. They can change as new information is obtained. Therefore, the ICCR does not need to wait for complete information to proceed with preliminary MACT floor determinations.

Alex Johnson commented that the ICR did not request information on pollution prevention, so information will need to be colleted in some other way. Another member responded that the control technique question in the ICR allowed companies to indicate that they were using combustion modifications (e.g., staged air) in addition to add-on controls. So the survey responses will provide some information on combustion modification pollution prevention techniques. Some members stated that identification of pollution prevention options is best left to the Work Groups, because Work Group members have technical expertise on combustion units and processes. Members noted that good combustion practices are a form of pollution prevention. One member suggested that improving energy efficiency at a plant, such that a turbine can be operated less, may be pollution prevention.

An environmental representative as well as an industry representative suggested output-based standards emission standards rather than input-based standards, because output-

to allow and encourage pollution prevention, but not to require specific actions. One pointed out that process changes can be very site-specific in terms of what is feasible and can be very

12.3 Public Comment

thought-provoking proposal. He commented that with respect to public participation, he thinks an _____ public is necessary and that all interest groups should stay away from propaganda. He fully supports public involvement. With respect to pollution prevention, he cautioned the

suggested that with regard to the specific proposal, (1) the caucus should be sure it represents the position of the entire environmental community, and (2) wording should be added to explicitly

Ruth Mahr, an environmental organization representative, commented that given the lack of complete information and funding to fully research dioxins, pollution prevention is the safest

also representing environmental interests, agreed that pollution prevention should be a focus to reduce dioxin and mercury emissions. With regard to public participation, he suggested that

12.4 Next Steps

should give their comments or input to Keith Harley by October 27,1997. Committee members who have feedback on, or suggested changes to, the pollution prevention proposal should give

bring proposals for discussion at the November Coordinating Committee meeting.

13.0

13.1 Discussion

John Huyler of Keystone grouped the parking lot issues from the July meeting according to their disposition, as follows:

Issues That Have Been Addressed

- The NO_X NSPS Proposal was addressed by the Coordinating Committee's consensus decision to table the issue and suggest individuals submit comments.
- The issue of small business interests is being addressed by the small entity caucus that has formed in association with the ICCR process.
- The Incinerator White Paper is being addressed through the schedule presented by the Incinerator Work Group.

Ongoing Consideration Throughout the ICCR Process

- Other regulatory programs that may impact the ICCR process (e.g. urban air toxics, great waters, section 112(c)(6) pollutants). One Coordinating Committee member indicated that EPA has posted the Section 112(k) Urban Air Toxics Program Development of Air Emissions Inventory to the TTN for comment by mid-October. This member commented that this inventory includes emissions estimates from various source classifications. Another member said progress is continuing on Great Waters, Urban Air Toxics, and 122(c)(6) pollutants and there should be on-going reports to the Committee on the results of these efforts.
- Executive Orders and Acts to be considered during the ICCR.

EPA Responsibility

- Report on possible process heaters regulatory overlap issues, e.g., which heaters are being covered under other MACT standards.

Initial Work Group Responsibilities

- Developing HAP lists was removed from the parking lot and is now initially the Work Group's responsibility. The Committee decided that the Work Groups were to develop lists of HAPs of interest for testing based on information posted to the TTN by Fred Porter of EPA, the Testing and Monitoring Protocol Work Group's input, emissions test data and other considerations.

Issues Addressed by Primers

- There have already been primers offered on issues such as dioxin formation and setting MACT floors.

- The Council of Industrial Boiler Owners (CIBO) has offered to present a primer on combustion processes in the evening during the next Coordinating Committee meetings. The Committee agreed this primer would be useful and suggested Wednesday evening at 7:30 pm.

Parking Lot Issues for Coordinating Committee to Address

- Establishment of some uniform criteria for the submission of emission test data. A Committee member pointed out that the guidance given to the Process Heater Work Group at the July meeting could be used by other Work Groups. It was also discussed and the Coordinating Committee decided to request the Testing and Monitoring Protocol Work Group to develop a check list of things needed when submitting emissions test data to the ICCR process.

- Possible legal issues of concern with inclusion of work practices and operating practices in the MACT floor and MACT development. The Coordinating Committee decided that this would be readdressed after the presentation on environmental justice and pollution prevention to be given by the environmental caucus.

13.2 Public Comment on Parking Lot Issues

David Marrack, of the Galveston-Houston Association for Smog Prevention and a member of the Boiler Work Group and the Incinerator Work Group, commented that he would like to see EPA present a complete list of Executive Orders and other Acts that may impact ICCR. He also requested a list of other MACT standards that cover combustion sources.

14.0 FUTURE MEETINGS

The next meeting is scheduled for November 18 and 19 in Houston, Texas. Possible agenda topics include:

- solid waste definition subgroup recommendation
- milestone tracking subgroup presentation and discussion of Work Group plans and schedules
- further discussion of environmental caucus proposals
- Incinerator Work Group subcategories
- Gas Turbines Work Group pollutant list
- IC Engines Work Group proposed test program, and perhaps preliminary MACT floors

Meeting dates for 1998 were agreed upon. These are:

- February 24-25 in Greensboro, NC
- April 28-29 possibly in Colorado
- July 21-22 possibly in California
- September 22-23 in Durham, NC
- December 8-9 possibly in Houston

There will be a tour of a wood products/furniture plant in conjunction with the February meeting. There may also be a tour in conjunction with the Colorado meeting.

Coordinating Committee members should give suggestions for non-North Carolina meeting locations to John Huyler. Locations will be finalized at the November meeting.

Attachment 1

COORDINATING COMMITTEE MEETING AGENDA

Industrial Combustion Coordinated Rulemaking
Coordinating Committee
Draft Agenda
September 16-17, 1997

Omni Durham Hotel & Durham Civic Center
201 Foster Street
Durham, North Carolina
(919) 683-6664

Notes

- Business Casual is acceptable attire for all Coordinating Committee and Workgroup meetings.
- Materials Posted on the TTN one week prior to the meeting will not be provided at the meeting. Please bring your own copies.
- A Dioxin Primer will be held Wednesday morning from 8:00 - 12:00 p.m. for Coordinating Committee and Workgroup members as well as other interested people.

Major Meeting Objectives

Information Collection Request (ICR): Report and discuss the results of the ICR.

NO_X NSPS Proposal for Boilers: Present concerns with the proposed NO_X NSPS proposal and transmit these concerns to EPA.

Dioxin Discussion: Facilitate discussion on dioxin for setting CC priorities

Environmental Caucus: Identify high priority issues and areas of concern: pollution prevention, public participation, and environmental justice.

Location of Documents on TTN Needed for the Meeting

	Status Report	Other
Coordinating Committee		•Agenda (CC16SE7A.WP6/PDF) •Subgroup tracking report (SUBTRACK.WP6/PDF)
Boiler WG	BOSTSEPT.WP6/PDF	Boiler WG statement on proposed revision to NO_X NSPS (NSPS-3.PDF)
Process Heater WG	PHSTSEPT.WP6/PDF	Response to CC questions from July meeting (PERF_CC.WP6/PDF)
Incinerator WG	SUBTBLE.WP6/PDF	Table for tracking status (presentation to CC) (SUBTBLE.WP6/PDF)
IC Engine WG	ENSTSEPT.TXT	
Combustion Turbine WG	CTSTSEPT.WP6/PDF	
Testing and Monitoring Protocol WG	TMSTSEPT.WP6/PDF	•Discussion on real time test methods for IC Engine WG (TMREALTM.WP6/PDF) •Cost Model for CC (COSTMOD.WP6/PDF)
Economic Analysis WG	ECSTSEPT.WP6/PDF	

All of these files can be found on the originating Work Group's "Miscellaneous Download Area", with the exception of the Coordinating Committee Agenda, which can be found under "Meeting Agendas".

Tuesday, September 16

8:30 a.m. Welcome and Agenda Review
Selection of Stakeholder Co-Chair for Upcoming Fiscal Year

8:50 a.m. Administrative Updates
~Budget
~Workgroup Nominations and Withdrawals

9:25 a.m. Non-hazardous Solid Waste Definition Subgroup Status Report

9:30 a.m. Public Comment and Opportunity for Public to Exchange Ideas with Coordinating Committee (CC)

9:45 a.m. Questions or Comments About Workgroup Status Reports Posted to the TTN

10:15 a.m. BREAK

10:30 a.m. Presentation by ICCR Tracking Subgroup
Facilitated Discussion

11:15 a.m. Update on the Information Collection Request (ICR)

11:45 p.m. Public Comment and Opportunity for Public to Exchange Ideas with Coordinating Committee (CC)

12:00 p.m. LUNCH

1:15 p.m. Facilitated CC Discussion about Information Collection Request (ICR) in Order to Provide Feedback to EPA

1:45 p.m. Schedule for Incorporation of New Information and Refinement of the Inventory Database

2:00 p.m. Boiler Workgroup Presentation on NO_X NSPS Proposal (NO_X Emissions from New Fossil-Fuel Fired Steam Generating Units)

- Present concerns with the proposed NO_X NSPS proposal.

2:30 p.m. Public Comment and Opportunity for Public to Exchange Ideas with Coordinating Committee (CC)

2:45 p.m. BREAK

3:15 p.m. Continue Discussion about NO_X NSPS Proposal and Consideration of Recommendations to EPA

3:45 p.m. Determine CC Meeting Schedule for 1998

4:00 p.m. Review of Previous Parking Lot Issues and Those Identified During the Day's Discussion. Agreement on Which to Discuss Today.

- Previous Parking Lot Issues (see Notes below)

Facilitated CC Discussion of Selected Topics from Parking Lot

5:20 p.m. Public Comment and Opportunity for Public to Exchange Ideas with Coordinating Committee (CC)

5:40 p.m. Overview of Tomorrow's Agenda

5:45 p.m. Adjourn

Wednesday, September 17

(See Note below:)

1:00 p.m. Convene
Agenda Review

1:10 p.m. Facilitated Discussion on Dioxin Aimed at Setting Priorities for CC Activities

2:10 p.m. Environmental Caucus Presentation

- To share with the CC high priority issues and areas of concern.
  - * Pollution prevention
  - * Public participation
  - * Environmental justice

3:10 p.m. Public Comment and Opportunity for Public to Exchange Ideas with Coordinating Committee (CC)

3:30 p.m. BREAK

4:00 p.m. Incinerator Workgroup Presentation

- Inform the CC of the WG's format for subcategorization, preliminary subcategorizations and milestones for ICWI

4:15 p.m. Review of Status of Parking Lot Items
Proposed Items for Next Meeting Agenda

4:45 p.m. Review Flash Minutes

5:00 p.m. Adjourn

_____

Notes:

1) A primer on dioxin will be offered from 8:00 a.m. to 12:00 p.m in the Omni Durham Hotel. It will consist of 2 parts:

~ Presentation of Background Information
~ Questions and Answers from Anyone Present

2) Parking lot issues held over from previous meetings are listed below. Additional description of these items is contained in section 12.0 of the minutes of the July 22/23 CC meeting (file named CC22JL7L.WP6 or .PDF on the TTN)

-process heaters regulatory overlap issues
-other regulatory programs that may impact ICCR
-executive orders to be considered during the ICCR
-small business issues and SBREFA
-relationship between NO_X NSPS proposal and the ICCR
-industrial-commercial waste incinerator white paper on regulatory options
-legal issues on inclusion of work practices and operating practices in the MACT floor and MACT
-hazardous air pollutants lists
-criteria for submitting emission data

Attachment 2

COMPLETE ATTENDANCE LIST FOR COORDINATING COMMITTEE MEETING

List of Attendees at the ICCR
Coordinating Committee Meeting
September 16, 1997
Durham, NC

Greg Adams
Amanda Agnew
Richard Anderson
Todd Barker
Lisa Beal
Beth Berglund
Bob Bessette
Michael Brand
Atly Brasher
Mark Calmes
Stanley Carter
Roy Carwile
Charles Case
A.J. Cherian
Delbert Cline
Sam Clowney
Linda Coerr
Jan Connery
Andy Counts
Kim Davis
Gerald Doddington
Donald Dowdall
Jim Eddinger
Charles Elder
John Fanning
Chuck Feerick
Stephanie Finn
Michael Fisher
Leslye Fraser
Mike Gallaher
Steve Gerritson
Lee Gilmer
Ted Guth
Keith Harley
Michael Hewett
Peter Hill
Tim Hunt
John Huyler
Alex Johnson
Robert Kaufmann
Chuck Keffer
John Klein
Dennis Knisley
Greg Kraft
Pamela Lacey
Michelle Lusk
Jed Mandel
David Marrack
Bill Maxwell
Jim McCarthy
Tom McGrath
Ruth Mead
Andy Miller
Farhana Mohamed
Bob Morris
Norm Morrow
Vick Newsom
Bill O'Sullivan
John Ogle
Roy Oommen
Bob Palzer
William Passie
John Paul
Janet Peargin
Bill Perdue
Fred Porter
Christy Presson
Donald Price
Sims Roy
Glenn Sappie
David Schanbacher
Marvin Schorr
Jim Seebold
Gunseli Shareef
Jeff Shumaker
George Smith
Jeffrey Smith
Mike Soots
Bob Stachowicz
James Stumbar
Prakasam Tata
Karluss Thomas
Mae Thomas
Dick Van Frank
Tom Waddell
Scott Warner
Bob Welch
Bill Wiley
Jane Williams
Jeff Willis

Dana Worcester
Vladimir Zaytseff

List of Attendees at the ICCR
Coordinating Committee Meeting
September 17, 1997
Durham, NC

Greg Adams
Amanda Agnew
Todd Barker
Lisa Beal
Beth Berglund
Darrell Bowen
Michael Brand
Atly Brasher
Wendell Brough
Mark Calmes
Stanley Carter
Roy Carwile
Delbert Cline
Sam Clowney
Jan Connery
Andy Counts
Norheit Dee
Gerald Doddington
Donald Dowdall
Alexandra Dunn
Jim Eddinger
Charles Elder
John Fanning
Chuck Feerick
Frank Ferraro
Michael Fisher
Klane Forsgren
Leslye Fraser
Gordon Gaetke
Mike Gallaher
Steve Gerritson
Sam Gieryn
Lee Gilmer
Keith Harley
Bill Heater
Peter Hill
Tim Hunt
John Huyler
Alex Johnson
Jim Jordan
Robert Kaufmann
Jim Kilgroe
John Klein
Dennis Knisley
Greg Kraft
Pamela Lacey
Steven Lanier
Keri Leach
Alison Ling
Michelle Long
Bob Lott
Michelle Lusk
Joe Mackell
Dave Maddox
Jed Mandel
Ruth Mahr
David Marrack
Jay Martin
Bill Maxwell
Jim McCarthy
Tom McGrath
Ruth Mead
Charles Miller
Michael Milliet
Farhana Mohamed
Bob Morris
Norm Morrow
Vick Newsom
Bill O'Sullivan
John Ogle
Roy Oommen
Lawrence Otwell
Valerie Overton
Bob Palzer
William Passie
John Paul
Janet Peargin
Bill Perdue
Fred Porter
Christy Presson
Donald Price
Brahim Richani
Glenn Sappie
David Schanbacher
Marvin Schorr
Jim Seebold
Gunseli Shareef
Jeffrey Smith
Jennifer Snyder
Mike Soots
Bob Stachowicz
Oliver Stanley
James Stumbar
Prakasam Tata
Larry Thompson
Paul Tucker
Dick Van Frank
Scott Warner
Bob Welch
Bill Wiley
Jane Williams
Jeff Willis
Dana Worcester
Vladimir Zaytseff

Attachment 3

WORK GROUP NOMINATIONS AND WITHDRAWALS

INDUSTRIAL COMBUSTION COORDINATED RULEMAKING FEDERAL ADVISORY COMMITTEE

[A.K.A. ICCR COORDINATING COMMITTEE]

EPA Recommendations - New Work Group Members September 16, 1997

Boiler Work Group

> None

Process Heater Work Group

> David Schanbacher (State of Texas) - I-G-392
> David Smith (Central Soya Co.) - I-G-401
> Oliver Stanley (Cargill Inc,) - I-G-391

Incinerator Work Group

> Wayne Elliot (Georgia Health Services) - I-G-354
> Ed Repa (National Solid Waste Management Assn) - I-G-373
> Beth Berglund (Merck & CO) - I-G-394
> Doug Finan (Glaxo Welcome) - I-G-395
> Kay Rykowski (Stillwater Tech) - I-G-405

Gas Turbine Work Group

> Gerald Napierala (Solar Turbines) - I-G-407

Internal Combustion Engine Work Group

> None

Testing and Monitoring Protocol Work Group

> Thomas McGrath - I-G-406
> Robert Mullowney - I-G-393

Economics Work Group

> Glenn Sappie (State of North Carolina) - I-G-372
> Lachhman Dev - I-G-396

INDUSTRIAL COMBUSTION COORDINATED RULEMAKING
FEDERAL ADVISORY COMMITTEE

[A.K.A. ICCR COORDINATING COMMITTEE]

EPA Recommendations - Work Group Member Alternates
September 16, 1997

Boiler Work Group

> None

Process Heater Work Group

> None

Incinerator Work Group

> Paul Tucker (International Paper) - I-G-379 - as alternate to Jeff Shumaker
> Dana Worchester (Assn of Container Reconditioners) - I-G-405 - as alternate to Kay Rykowski

Gas Turbine Work Group

> Peter Roberts (Solar Turbines) - I-G-133 - as alternate to Gerald Napierala

Internal Combustion Engine Work Group

> None

Testing and Monitoring Protocol Work Group

> Karel Jelenik - I-G-378 - as alternate to David Fashimpaur

Economics Work Group

> None

INDUSTRIAL COMBUSTION COORDINATED RULEMAKING
FEDERAL ADVISORY COMMITTEE

[A.K.A. ICCR COORDINATING COMMITTEE]

Work Group Member withdrawals
September 16, 1997

Boiler Work Group

> None

Process Heater Work Group

> None

Incinerator Work Group

> Todd Eckert (Merck)
> Sandra Birchead (Glaxo Welcome)
> Joe Tessitore
> John Ramsey (State of Kansas)

Gas Turbine Work Group

> None

Internal Combustion Engine Work Group

> John Blair (Valley Watch)

Testing and Monitoring Protocol Work Group

> None

Economics Work Group

> Michael Rusin (API)
> Dick Van Frank (Audubon Soc.)

Attachment 4

TABLE OF COORDINATING COMMITTEE AND WORK GROUP MEMBERSHIP BALANCE

ICCR "Balance"

	Coord. Com.	Boil WG	PH WG	Inc. WG	GT WG	IC Eng WG	TMP	Econ WG
Enviro	5	3	1	3	1	--	--	1
State/local	4	5	--	4	--	3	3	--
Source	8	20	8	12	8	5	10	6
Manufacturer	5	4	2	5	5	8	4	1
Fuel Prod./Sup.	3	6	1	1	2	2	3	2
Labor/Research	1	--	--	--	--	1	--	--
EPA	1	1	1	1	1	2	1	1
WG	7	--	--	--	--	--	--	--
Totals	34	39	13	26	17	21	21	11

Attachment 5

WORK GROUP STATUS REPORTS

STATUS REPORT
September 8, 1997
BOILER WORK GROUP

- Met as a work group, in person, on July 24 and August 19. The next scheduled meeting is September 18 after the next coordinating committee (CC) meeting in Research Triangle Park, North Carolina.

- The agenda for the July 24 work group meeting focused on the emission test database, the waste definition subgroup formed by the Coordinating Committee (CC), a presentation on emission data from landfill gas combustion, a discussion of model boilers development, review of the ICCR inventory database, and a discussion of the recently proposed boiler NO_X NSPS.

- The agenda for the August 19 work group meeting focused on the proposed boiler NO_X NSPS revision and its relationship to the ICCR, findings of the inventory database review, approaches for subcategorization, approaches for prioritization, development of list of HAPs of interest, discussion of possible uses of inventory database, and a Microsoft Access demonstration.

- The solid waste definition subgroup formed by the Coordinating Committee (CC) includes 5 members of the Boiler WG: Jim Eddinger, David Cooper, Frank Ferraro, Mike Fisher, and Mike Soots. The subgroup was tasked to attempt to develop a recommended definition of solid waste by the November CC meeting.

- The Work Group discussed the recently proposed boiler NO_X NSPS and whether the industrial boiler portion of this effort should be part of the ICCR. Members did not reach consensus on making recommendations to the CC on the NO_X NSPS. Members did concur that a presentation should be made to the CC highlighting issues raised during the discussion, such as conflicts in definitions between the NO_X NSPS and the ICCR project, groups and sizes of regulated units, toxics vs. criteria pollutants, trade-offs, and constraints.

- The Work Group discussed several errors they found while reviewing the inventory database. Reviewers in the fossil fuel subgroup noted many repeat entries and incorrect listings in the database. There appeared to be multiple SIC code listings and incorrect SCC code entries. The subgroup decided to assume the descriptor is more correct than the SCC code. These are to be noted for correction. The subgroup concurred that a big issue is the amount of missing data fields. The quality of the data appears to vary by State. The subgroup will need to determine how to approach the missing data. Alternatives were discussed without resolution. One option would be to use State regulations as default controls to be applied to sources without control equipment information. The Work Group concurred that by the end of August, members should focus on identifying misclassified units, misclassified fuels, and obvious errors such as facility closures.

- The Nonfossil Fuel Subgroup reported that, in their reviewed of the ICCR inventory database, most units with "W" in their ID code or "X"s in their SCC code are duplicates of other entries. It was suggested that WG members reviewing other industries also look carefully at facility and unit ID codes with W's to see if they are duplicates and try to correct SCC codes containing X's. It was reported that the database contains few publicly owned treatment works (POTWS). Prakasam Tata stated that his organization has sent survey forms to 170 municipalities and expects to get more complete information than is in the ICCR inventory database. It was also reported that CMA is trying to meet the August deadline for review of the chemical industry portion of the database. Individual companies are reviewing the data for all types of combustion units at their facilities.

- The work group continues to discuss the subject of subcategorization. Jim Stumbar described a possible framework for subcategorizing non-fossil fuel fired boilers, looking first at fuels (gases, liquids, tars and solids) and than at equipment design. Bob Palzer noted that the ICCR Environmental Caucus is hoping to bring forward another potential subcategorization approach, but it will likely not be ready until the September 18 boiler meeting because the next face-to-face Environmental Caucus meeting is August 21. It was also suggested that a matrix of fuels, combustion devices, and associated hazardous air pollutants (HAPs) may be a useful tool for subcategorization and that levels of mercury and chlorine may be a consideration in developing subcategories.

- The work group concurred that there is a need to start reviewing emissions data for applicability and the need for emissions testing. The group discussed how to determine what emissions to test for and where to test. No resolution was reached on this subject.

- The Work Group discussed HAP tables provided by Jim Eddinger and Andy Bodnarik summarizing available test information for each of the 188 HAPs. The Work Group requested more detailed information be provided, such as data ranges, average values, detection levels, toxicity rankings, and criteria pollutants that were also tested. ERG and EPA will incorporate Work Group suggestions on the HAP lists. They will also provide a straw man proposal on which HAPs to focus on at the September 18 meeting.

- Members discussed ways to prioritize work on the Boilers Work Group. The members decided that prioritizing could not be done until further information was provided to them to answer questions that members had on the information available in the inventory and emissions databases. The Work Group requested that EPA and ERG develop summary tables that would provide answers to the members questions.

- The Work Group concurred to keep Jim Stumbar as the co-chair and Mike Hewett as the alternate for one more year. In one year their roles will be reversed. This recommendation will be forwarded to EPA and the CC.

Prepared by: Jim Eddinger
EPA co-chair

Stationary Combustion Turbine Work Group
Status Report to the ICCR CC
September 3, 1997

I. Meetings and Teleconferences

Since the last status report was given on July 22, 1997, the Combustion Turbines Work Group (CTWG) met on July 24 for a one day meeting in Long Beach, CA and on August 27 for a two hour teleconference. The CTWG also conducted a Technology Workshop for gas turbines on July 25 in Long Beach, CA.

II. Status

At the July meeting, the CTWG discussed forming a MACT Floor Screening Task Group. At the August 27th meeting, the CTWG decided to move forward with the determination of the potential MACT floor even though the CTWG identified additional source test reports for HAP emissions which are not currently in the EPA ICCR Emissions Database. The CTWG also agreed that the objective of the MACT Floor Screening Work Group is to develop a tentative MACT floor for the combustion turbines category (or subcategories if more than one) by making assumptions regarding the emissions database. An initial teleconference to discuss this task was held on September 3, 1997.

(i)- MACT Information Collection/Database Enhancement Task Group- This task group is responsible for reviewing/enhancing the Stationary Combustion Turbine Population and Emissions Databases. The activities conducted on each database are presented below.

Population Database:

The task group completed the screening activities on the population database which were requested by the CC. These activities included identifying records which do not belong in the turbine database, identifying duplicate records, and identifying records which do not belong under the ICCR effort. All records found for non-turbines were forwarded to the corresponding EPA co-chair for inclusion in their databases.

The task group is currently reviewing the gathered population information in the population database for validity. A list of important fields for the population information which reflects the necessary parameters for subcategorization and model plant development was developed. Members provided additional information for known sites, including turbine operating parameters, for inclusion in the population database. Manufacturers information will be provided to include information regarding parameters for specific turbine models. All information updates and data handling procedures are being

performed in accordance with the recommendations provided by the Coordinating Committee.

The task group formatted the 1992 section 114 population data in order to compare the data with the ICCR CT gathered population information. Preliminary comparisons indicate that at least 2,300 additional turbines are included in the 1992 data. The task group is evaluating methods for incorporating these missing records into the ICCR CT Population Database.

Other activities being conducted by the task group include converting turbine size to standard units (MW), gathering manufacturers data for turbine makes and models, obtaining additional information from other sources including work group members, and developing a Final Population Database using the important list of fields.

Emissions Database:

The task group developed a list of important fields for the emissions source test reports corresponding to the minimum information necessary to designate a test report as usable for emission estimate. The task group reviewed and identified the missing information from the gathered test reports for HAP emissions. A total of 28 source test reports were reviewed. The task group is currently in the process of gathering the missing information for these reports in an effort to make these reports usable. Also, additional HAP test reports are being obtained. Thus far, the task group has identified and gathered 13 source test reports for landfill and digester gas-fired turbines.

(ii)- Subcategory Analysis Task Group- The task group submitted a memorandum regarding the potential subcategories for stationary gas turbines during the July 24, WG meeting. The previously identified potential subcategories included three subcategories (size, fuel, and firing temperature) and possibly a fourth subcategory (duct burners). The CTWG concluded that the turbine firing temperature is not practical as a subcategory, since most turbine operators do not know the firing temperature of their machines, because of modifications made by the manufacturer. In addition, over the years, the firing temperature has been increasing in order to increase thermal efficiency of gas turbines. The remaining possible subcategories include size and fuel and possibly duct burners. To date, no other subcategories have been identified. The task group will decide whether the remaining subcategories are practical subsequent to completion of the population database.

(iii) HAP Reduction Technology Task Group- The task group determined that turbine operating practices are not feasible for use as potential MACT standards due to their complexities.

However, the task group decided to leave open the possibility for including other turbine operating practices in the standard.

The task group conducted a technology workshop on July 25, in Long Beach regarding factors/parameters which may influence the formation of HAPs from combustion turbines. The workshop also included topics regarding available technology for HAP reduction, the potential of dioxin emissions, and potential surrogates for HAP emissions. The workshop flash minutes are posted on the TTN for reference.

Other topics being reviewed by the HAP Reduction Task Group include duct burners, and CO as a surrogate for HAPs. The task group will conduct a brief presentation session regarding duct burners at the September CTWG meeting.

The task group reviewed a report presented by Catalytica, which indicated that CO is not a good surrogate for HAPs emissions. The task group has identified and requested other studies conducted on this topic from WG members. The task group has not finalized their conclusions on CO as a potential surrogate for HAP emissions.

(iv) HAP vs. Criteria Pollutant Trade Off Task Group- The task group sponsored presentations during the turbine technology workshop which concentrated on the fundamentals of gas turbine combustion, combustor design as it relates to THC and CO emissions, formation of HAPs, and factors (operational and design) which directly affect HAP emissions. The task group is in the process of reviewing the presented information in an effort to identify a “surrogate” pollutant in lieu of HAPs for testing and monitoring purposes. In addition, the task group will review the presented operation and design factors for their feasibility and applicability to regulatory standards.

The task group will also review additional information identified during the July 24, CTWG meeting regarding potential surrogate for HAPs and combustion fundamentals of new turbine designs. This includes a write up by GE R&D Center and material referenced by J. Willis of Rolls-Royce and B. Lott of GRI.

(v) Test Methods Monitoring and Testing Task Group- The task group drafted a summary report of HAP emissions that should be measured in future emission testing of gas turbines. The report includes pollutant lists and recommended test methods from several sources of information, including source test reports gathered by EPA, recommendations from the ICCR Testing and Monitoring Protocol Work Group (TMPWG), and a technical report for gas-fired turbines presented by the Electric Power Research Institute (EPRI). The task group identified the list of pollutants from the gathered EPA test reports following two criteria. The first criteria identified the HAP pollutants that

accounted for 99 percent of the total mass emissions in any source test reports, and the second criteria identified the HAP pollutants which resulted in stack emissions higher than the corresponding test method detection limit.

The Test Methods Monitoring and Testing Task Group formed a subtask group to study the potential for dioxin, mercury, and metals (including chromium) emissions from gas turbines. The primary goal of this subtask group is to determine whether the CTWG should include these pollutants on the list of pollutants for which to test from stationary gas turbines. The subtask group will provide additional information regarding this issue subsequent to the CC dioxin primer, scheduled for the September meeting.

ECONOMIC ANALYSIS WORK GROUP
STATUS REPORT
September 5, 1997

Accomplishments Since the Last Status Report

- The Economic Analysis Work Group re-nominated Joe Mackell as Stakeholder Co-Chair and Glenn Sappie as the Stakeholder Co-Chair Alternate for the upcoming term to begin October 1, 1997.

- Glenn Sappie volunteered to participate in the newly formed State and Local Government Caucus and will be the liaison between the caucus and the Economic Analysis Work Group.

Tasks and Activities the Work Group is Currently Focusing On

- Monitoring source groups' activities.

Plans or Objectives of the Work Group Over the Next Two Months

- Provide guidance to the source groups on model plant development as needed.
- Review materials on Executive Orders in preparation for the analysis.

Meeting Dates and Locations Over the Next Two Months

- Economic Analysis Work Group members attending the September ICCR Coordinating Committee meetings in Durham are invited to attend an informal face-to-face meeting (dinner) tentatively scheduled for the evening of Tuesday the 16th.

- The next meeting of the Economic Analysis Work Group is scheduled for October 7, 1997, at 3:00 EDT. It will be a teleconference call. Joe Mackell will fax an agenda and call-in number prior to the meeting.

THE IC ENGINE WORK GROUP STATUS REPORT - September 3, 1997

EMISSIONS SUBGROUP:
Accomplishments since last meeting:

Since the July Coordinating Committee meeting, the Emissions Subgroup has continued to develop an emissions test plan for RICE and control devices that may reduce HAPs. The status of each component of the test plan is provided below:
. List of Pollutants for Emissions Testing: The Subgroup has requested input from the Coordinating Committee (via e-mail) and other ICCR participants (via the TTN) on the pollutants that should be included in future emissions testing for RICE. Suggestions for additional pollutants are due no later than September 5, 1997. The Subgroup has gathered references cited in comments received thus far.
. Test Methods for Emissions Testing: The Subgroup has requested input from the Testing and Monitoring Work Group on test methods that can provide on-site data for the pollutants of interest.
. Test Matrix: The IC Engine Work Group agreed on the principles of the test matrix during the July work group meeting.
. Selection of RICE and Controls to be Tested: Given the limited resources under ICCR, the Subgroup has agreed that the goal for the test plan will be to determine efficiencies of control devices that may reduce HAPs. The Subgroup has agreed that if only one or two engines can be tested with ICCR resources, the engines will be selected so that will be achievable for other engines in the category.
. Prioritization of Testing: The Subgroup has agreed that since ICCR resources will be limited, engines to be tested will be prioritized so that the results of testing may be used for other engines in the category.

Current focus of task and activities for the work group:

The Emissions Subgroup is working on the test plan for emissions testing of RICE under ICCR. The primary focus of the continuing work is selection of the RICE and controls that will be tested for emissions under ICCR. The Subgroup is also evaluating comments related to the pollutants that will be tested and input from the Testing and Monitoring Work Group on test methods that will provide on-site data.

Plans and objectives for work group between September and November:

The Emissions Subgroup will continue to work on the test plan for emissions testing of reciprocating internal combustion engines (RICE) under ICCR and gain consensus on the test plan from the RICE Work Group. The RICE Work Group is planning to present the test plan, and request

funding for emissions testing, during the November Coordinating Committee meeting.

POPULATION SUBGROUP:
Accomplishments since last meeting:

The internal combustion engine population subgroup is primarily focused on "cleaning" the database, developing verifiable data and defining the MACT floor.

The database work also includes extracting and verify information from several fields to accurately portray the engine "universe'.

The work will include:

a) make and model information to provide engine parameters, b) revising the SCC,
c) horsepower conversion calculation,
d) defining engine location demographics, e) resolve "blanks" in control device fields.

The final database will be compared to other databases for accuracy. The subgroup is on schedule to provide MACT floor engine and control statistics by November 1997.

Meetings/conference calls between September and November meetings:

1. Two conference calls anticipated by both subgroups as they prepare information for the November presentations.

2. Anticipate one conference call involving the entire RICE WG.

STATUS REPORT
September 5, 1997
PROCESS HEATERS WORK GROUP

- Two work group meetings have been held since the July Coordinating Committee meeting--a face-to-face meeting July 24 in Washington, D.C., and a teleconference meeting on September 3. The next scheduled meeting is September 18 in RTP.

- The Work Group reviewed the draft response to the Coordinating Committee responding to its guidance to the Work Group on the PERF presentation and report. This draft response provides preliminary replies to some to the questions asked by the Coordinating Committee and lays out several approaches to completing the response. The draft response has been placed on the TTN (ICCR Bulletin Board; Process Heaters Work Group section; Miscellaneous Files; "PERF_CC.WP6"). Further work on the response will be conducted following the dioxin primer discussion at the September Coordinating Committee. (The draft response should be considered an appendix to this Status Report.)

- A 35-page PERF report has been placed on the TTN (ICCR Bulletin Board; Process Heaters Work Group section; Miscellaneous Files; "PERFREPT.PDF") in Adobe Acrobat format. This report summarizes the PERF project and presents the results. In addition, it provides information on the chemical kinetics development, laboratory flame, and 100 kW research furnace measurements. A 235-page report, plus appendices, that details the 900 kW full-scale testing and analytical activities and is the final report on the air toxics measurements is in the process of being placed in the ICCR docket (this more extensive report is too lengthy to place on the TTN). An alert will be posted when the report is available in the docket.

- Data base edits were received from some members and transmitted to ERG.

Prepared by: Bill Maxwell
EPA co-chair

TMPWG STATUS REPORT
September 5, 1997

ISSUES WITH ICCR DIRECTION WANTED:

None

STATUS Of PRODUCTS UNDER DEVELOPMENT

TMPWG List of potentially significant HAP

In May and August, we delivered to the individual SWGs consensus draft lists and explanations of how we arrived at those lists. Status is summarized in the table below. It is the SWG responsibility to decide what to do with those lists.

	Turbines	IC Engines	Boilers	Process Heaters
Natural Gas	X	X	X	X
Refinery Gas			X	X
Diesel	polling members for info	X		
Oil			X	
Digester Gas	**X** (Aug)	**X** (Aug)	X	
Landfill Gas	not available	polling members for info	not available	
Coal			X	
Wood			being developed	

At the same time, we delivered a list of the test methods that were identified in the literature reviewed as being used to generate this list. We anticipate that in the future we will work with the SWGs to identify appropriate test methods for future data gathering.

Test cost model

We have posted (and asked for SWG comments on format and content) a revised test cost model intended to promote SWG use of consistent test cost assumptions during the initial budget planning and test plan development for data gap filling.

Report on TMPWG assessment of the significance of different test methods on the reported formaldehyde emissions

Project complete and posted**.**

Guidance on additional data quality issues

In the last status report we had identified several issues and anticipated delivery of guidance by September 1997. A subgroup was formed to complete this work, after meeting in El Segundo on July 25 we further refined our product list and the September status is noted below.

How to interpret existing data that is reported as "below detection limits." Developing consensus. Anticipate posting consensus guidance in late September.

QA\QC and Generic guidelines for Quantitative assessment of ICCR Emissions Database We are documenting the approach used by IC and GT SWGs with the assumption that later SWGs may follow similar paths. Product delivery expected by November."

List of existing test methods, limitations, and interferences Response to IC SWG request for guidance on the status of 'real time' test methods for a finite list of pollutants is posted.

(NEW) Product of incomplete combustion (PIC) document.
Subgroup being formed in response to CC request. Goal is to deliver product November 8 (10 days before CC meeting.)

ICCR Incinerator Work Group
Status and CC Report
Sept. 9, 1997

In response to the Coordinating Committee (CC) request at the last meeting, the Incinerator Workgroup (IWG) has developed a table for tracking the status of the workgroup effort. This table is planned to provide the heart of each incinerator workgroup report to the CC. The first, preliminary draft of the table follows as Attachment I. For the information of the CC and to allow best evaluation of its utility, we have included our best current judgment of our status. The IWG would appreciate feedback on the table and it's content. We plan to discuss the subcategories in depth at the November CC meeting.

The IWG has also developed a plan for generating the information that will be needed for the ICWI Regulatory Alternatives Paper (RAP), which EPA must issue by Nov. 16, 1998 under the ICWI consent agreement. The timeline and content basis for that effort follows as Attachment II. The workgroup expects to have a draft RAP completed in July 1998 for review by the CC, preferably in August 1998. This should permit adequate time to incorporate CC feedback and have the CC forward a final recommendation to EPA in September or early October 1998.

Attachment I

IWG REGULATORY SUBCATEGORIES AND STATUS

PRELIMINARY DRAFT

September 9, 1997

Potential subcategory	Assigned CAA Section(s)[1] ---------- 111 112 129			Status[2]	ICWI or OSWI	Regulatory Development Stage[3]	Next Milestone/ Date	Comments
Subteam #1: Pathological, Crematory and Pharmaceutical Wastes								
Pathological and Crematory	-	-	I	P	OSWI	S/G	Draft Subcatagory Description - 10/14/97	
Pharmaceutical			I	P	ICWI	S		Expect to combine with another subcatagory under subteam 2 or 5.
Subteam #2: Petroleum, Chemicals, Off-Gas, Soil, Plastics, and Sludge								
Non-halogenated offgas	-	D	-	D				Deferral approved at July 22-23, 1997 CC meeting in Long Beach.
Halogenated offgas	-	I		P	N/A	S	Draft Subcatagory Description - 10/14/97	
Thermal treatment	-	-	U	P	OSWI	S	Draft Subcatagory Description - 10/14/97	Covers soil, calcining, dewatering, etc.
Chemical and petroleum solids, liquids, and sludges	-	-	I	P	ICWI	S	Draft Subcatagory Description - 10/14/97	Includes industrial wastewater sludges, plastics, etc.

Potential Subcatagory	Assigned CAA Section(s)[1] ---------- 111 112 129			Status[2]	ICWI or OSWI	Regulatory Development Stage[3]	Next Milestone/ Date	Comments
Subteam #3: Wood, Wood Products, and Ovens								
Wood Incineration	-	-	I	P	OSWI	S	Draft Subcatagory Description - 10/14/97	All combustors in this category may be boilers.
Demolition Waste	-	-	I	P	OSWI	S/G	Draft Subcatagory Description - 10/14/97	
Construction Waste	-	-	I	P	OSWI	S/G	Draft Subcatagory Description - 10/14/97	
Ovens	-	U	U	P	-	S	Draft Subcatagory Description - 10/14/97	All combustors in this OSWI may be process heaters.
Subteam #4: Metals, Rubber, Can burn-Off, and Bottle Burn-Off								
Burn-off ovens	-	-	I	P	ICWI	S/G	Draft Subcatagory Description - 10/14/97	
Secondary copper	-	U	-	P	N/A	S	Draft Subcatagory Description - 10/14/97	Reviewing previous EPA work on this subcategory.
Secondary iron	-	U	-	P	N/A	S	Draft Subcatagory Description - 10/14/97	Reviewing previous EPA work on this subcategory**.**
Secondary precious metals	-	U	-	P	N/A	S	Draft Subcatagory Description - 10/14/97	Reviewing previous EPA work on this subcategory.
Secondary aluminum	-	-	-	N	N/A			MACT already under development**.**
Secondary lead	-	-	-	N	N/A			MACT already promulgated.

Potential Subcatagory	Assigned CAA Section(s)[1] ---------- 111 112 129			Status[2]	ICWI or OSWI	Regulatory Development Stage[3]	Next Milestone/ Date	Comments
Subteam #5: Small MWCs, Landfill Gas Flares, Agricultural, Concrete, Fiberglass, and Other								
Small MWC, residential waste, garbage	-	-	I	P	OSWI	S	Draft Subcatagory Description - 10/14/97	
Agricultural waste	-	-	I	P	OSWI	S	Draft Subcatagory Description - 10/14/97	
Construction/Demolition wastes	-	-	I	P	OSWI	S	Draft Subcatagory Description - 10/14/97	May be combined with Subteam 3 subcategories.
Landfill gas flares	-	U	-	P	N/A	S/G	Draft OSWI description and prioritization recommendation - 10/14/97	
Misc. industrial waste	-	-	U	P	ICWI	S	Draft Subcatagory Description - 10/14/97	May be combined with Subteam 2 subcatagory.
Fiberglass combustion	-	U	U	P	-	S	Draft Subcatagory Description - 10/14/97	
Concrete combustion	-	U	U	P	-	S	Draft Subcatagory Description - 10/14/97	

(1) **I**n regulatory Development; **U**ndetermined; **D**eferred

(2) **P**riority (Currently being actively pursued by the IWG); **S**hifted to another WG; **N**on-ICCR effort; **D**eferred consideration at this time

(3) Defining **S**ubcatagory; **G**athering emissions data; Developing test **P**lan; **T**esting; **E**stablishing regulatory data and floor; Dra**F**ting proposal and supporting documents; **R**eviewing comments on proposal; **D**rafting final rule and supporting documents

Attachment II

ICWI Regulatory Paper (RAP)

What is ICWI?

Solid waste combustors not included in the section 129 Municipal Solid Waste, Medical Waste, and Other Solid Waste categories.

Content of RAP

- Review of inventory and emissions databases, including ICR responses
- Identification of subcategories and groupings
- Model plant descriptions
- Emission levels and regulatory floors
- Regulatory alternatives, including pollution prevention alternatives.

Schedule

• Identify ICWI subcategories	October 28, 1997
• Obtain CC agreement	November 18, 1997
• Preliminary definition of model plants and complete assimilation of available emissions data.	March 1998
• Development of test plans to fill data gaps	March 1998
• Preliminary definition of regulatory options	June 1998
• Draft RAP	July 1998
• Preliminary review with CC	August 1998
• Obtain CC consensus and submit RAP recommended language to EPA	September 1998
• Submit RAP to litigants and court (EPA)*	November 1998

Other

- Boiler and process heater ICWI information must be integrated with the IWG effort.

*Clarification: The CC submits recommendations in the RAP to EPA. EPA then considers the RAP recommendations and prepares a separate regulatory alternatives "white paper" to be submitted to the Court by November 1998. (RVC, 9/18/97)

Attachment 6

PRESENTATION ON ICR RESPONSES

Report on Surveys Received

September 16, 1997

Survey Recap

- Survey sent to facilities with units burning non-fossil materials of interest, as reported in AIRS, OTAG, and State databases.
- Survey structure:
  - Part I: General Plant Information
  - Part II: Combustor Information
  - Part III: Economic Information

ICR SUMMARY

Total Sent Out:	11,983
Total Returned Unopened:	1,062
Total Completed:	7,503
Total Not Returned:	3,418
Total Part I Only:	4,742
Total Part IIs:	2,761
	(5,000 units)

Surveys with Part I Only by Fuel/Waste

- 63% of returned surveys have Part I only.
- Occurs across all waste types:
  - Crematories and Wood burning units had the highest proportion of Part IIs
  - MSW and CSW had the lowest proportion of Part IIs

Part I's

Part I Only Received:	4,742

Explained Part Is:

APWA & Tires	1,440
Duplicates	128
No Units	202
Plant Closed	125
Unit Closed	353
New Operator	44
Total Unique Explained Part Is	2,169
Unexplained Part Is	2,573

Phone Survey

- Made about 200 calls
- Calls distributed proportionally across fuel/waste categories
- About 8% of unexplained Part I only

Phone Survey Overall Results

Correctly Interpreted 51%

(shutdown unit, closed plant, duplicate,etc)

Exempt 29%

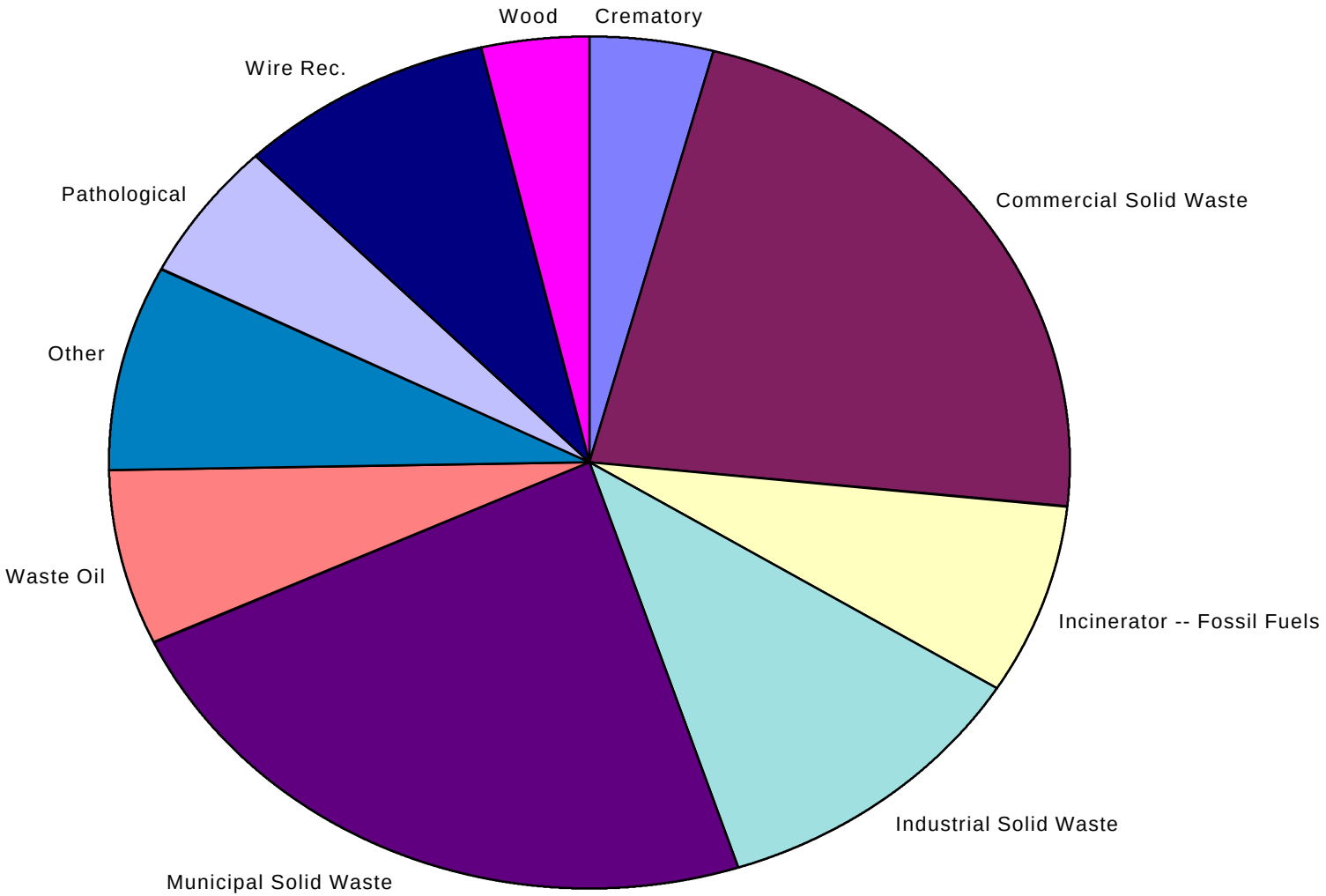
(burn only exempt material)

Incorrectly Interpreted 20%

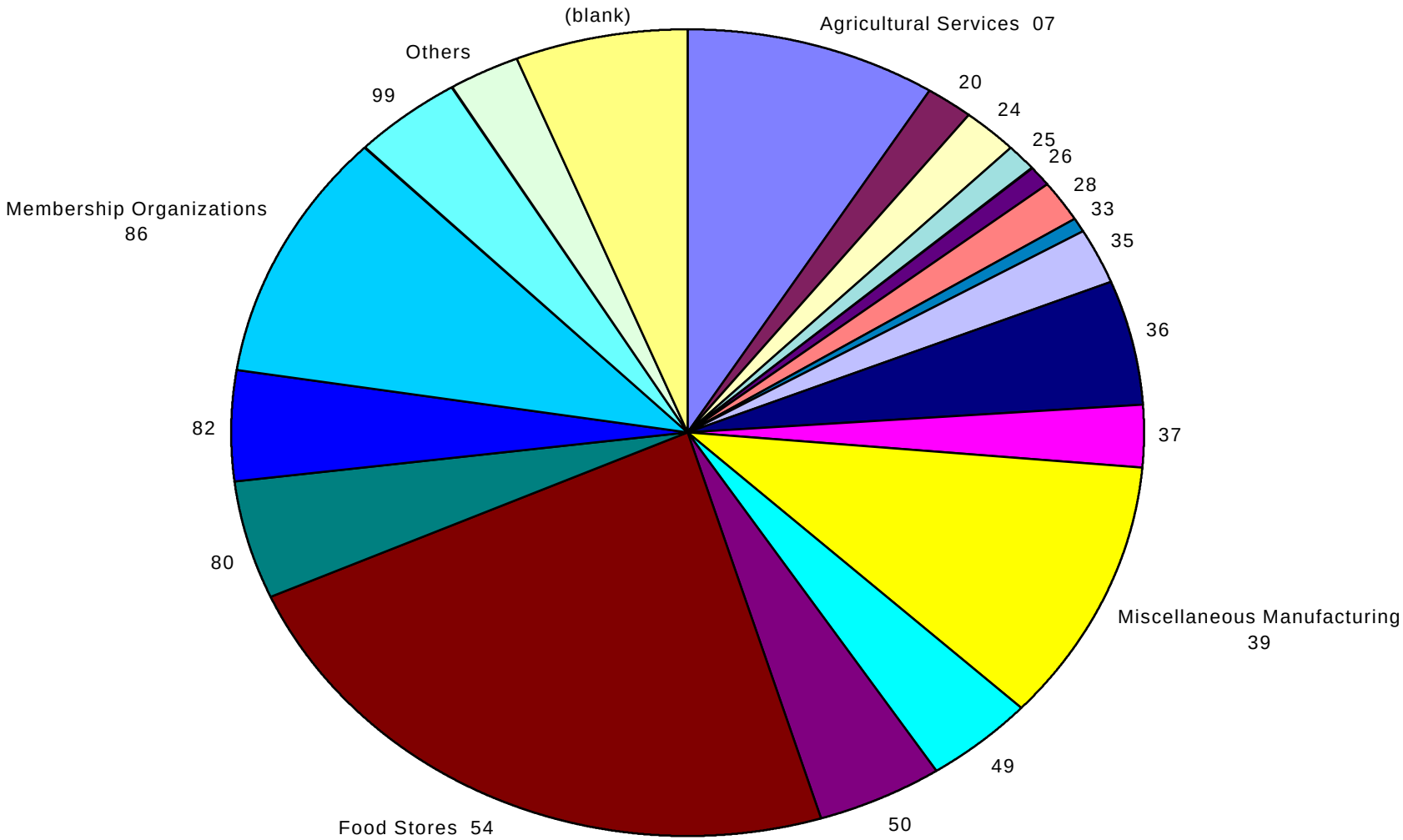
Phone Survey Results

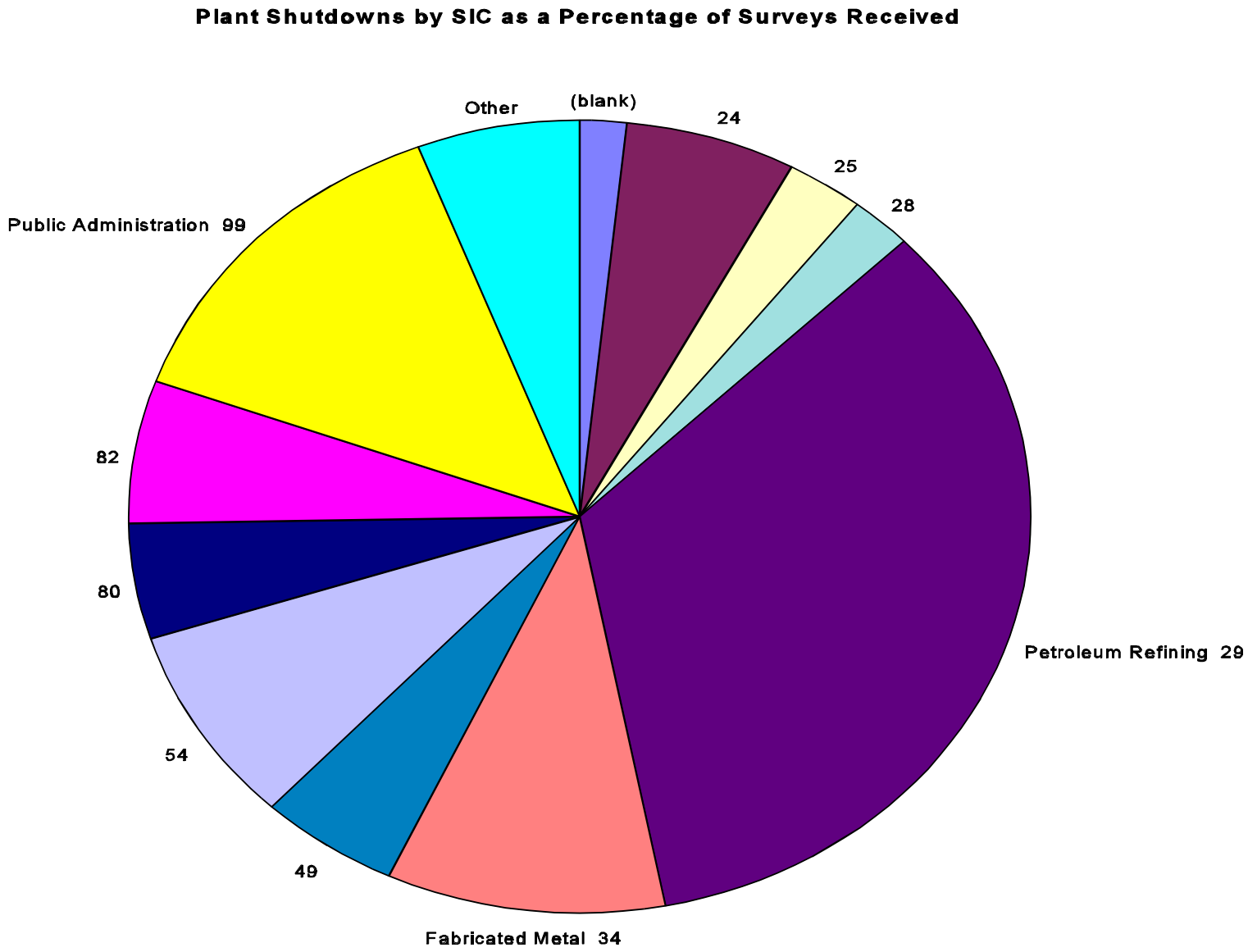
Fuel/Waste	# Calls	% Incorrect
Commercial Solid Waste	43	19%
Crematories	7	86%
Incinerator - Fossil Fuel	43	7%
Industrial Sludge	8	13%
Industrial Solid Waste	27	19%
Liquid Waste	6	17%
Municipal Solid Waste	31	10%
Other	6	50%
Pathological	42	29%
Process Gas	6	17%
Solid Waste	5	20%
Unknown	6	0%
Waste Oil	9	33%
Wire Reclamation	6	67%
Wood	19	42%

Unit Shutdowns by Fuel/Waste as a Percentage of Surveys Received



Unit Shutdowns by SIC as a Percentage of Surveys Received




Plant Shutdowns by SIC as a Percentage of Surveys Received
Other
(blank)
24
25
28
Public Administration 99
82
80
54
49
Fabricated Metal 34
Petroleum Refining 29

Attachment 7

PRESENTATION ON ICR AND INVENTORY DATABASE RELEASES AND POSSIBLE DATABASE MERGING

SCHEDULE FOR
INVENTORY DATABASE
REVISIONS AND
ICR SURVEY DATA
RELEASES

SOURCES OF UPDATED INVENTORY DATA

- ICR Survey Response
- Consistency corrections to Version 2.0
- WG Review of Inventory Database V.2.0.
  - misassigned units
  - obvious errors
- Additional databases from stakeholders

PREVIOUS CC GUIDANCE AND RESPONSE

- Guidance: Directed WG's to review Version 2.0 for misclassified units and obvious errors by end of August

- Response: All Source WG's have submitted recommended change
  - Misassigned units
  - Closures, other obvious errors

PREVIOUS CC GUIDANCE AND RESPONSE (CONTINUED)

- Guidance: Directed stakeholders to provide additional data for inclusion in version 3.0 by end of August

- Response: 2 new databases submitted
  - State of LA
  - DoD

- Presume there are no additional databases to factor into schedule

GENERAL PLAN FOR DATA RELEASES

- Separate releases of

  1. ICR Survey response database

  2. ICCR Inventory Database
     Version 3.0 Containing:
     - Consistency changes
     - Work Group changes
     - New databases

REASON FOR SEPARATE RELEASES

- Want to get survey data to WG's ASAP
- Survey data will require review and QA. It is easier for WG's to focus on corrections to survey data if separate
- Easier to correct/add to Inventory Version 2.0 without merging ICR survey data at same time (sequential approach to corrections)

Summary

- ICR Survey Database
  - Release 10/16/97
  - CC Guidance to WG's on review 11/18/97
  - Revised database 2/98

- Inventory V. 3.0 release 12/15/97

1. EVENTUAL MERGING?

   EPA will consider merging ICR survey data (after review) and ICCR inventory Version 3.0 in the future

   Need to think about benefits versus level of effort

   - significant effort
   - benefits?
   - some stakeholders have recommended not merging

2. EVENTUAL MERGING? (CONTINUED)

   Merging process would be complex

   - don't have common unit ID's
   - don't have complete SCC's
   - merge versus replace issues

   May provide EPA inclinations and solicit CC input at November meeting

3. ICR SURVEY DATABASE SCHEDULE

4. INVENTORY DATABASE SCHEDULE

BOILER WORK GROUP PRESENTATION ON NO_X NSPS PROPOSAL

ICCR Boiler Workgroup Presentation to the
ICCR Coordinating Committee at the September 16-17, 1997

"Proposed Revisions of Standards of Performance for Nitrogen Oxide Emissions From New Fossil-Fuel Fired Steam Generating Units; Proposed Revisions of Reporting Requirements for Standards of Performance for New Fossil-Fuel Fired Steam Generating Units"

Background

Pursuant to section 407(c) of the Clean Air Act, the EPA has reviewed the emission standards for nitrogen oxides (NO_x) contained in the standards of performance for new units. The proposed changes to the existing standards for NO_x emissions reduce the numerical NO_x emission limits for both utility and industrial steam generating units to reflect the performance of best demonstrated technology. The proposal also changes the format of the revised NO_x emission limit for electric utility steam generating units to an output-based format to promote energy efficiency and pollution prevention. As a separate activity, EPA has also reviewed the quarterly sulfur oxide, NO_x and opacity emission reporting requirements of the utility and industrial steam generating unit regulations contained in 40 CFR part 60, subpart Da and Db.

The public comment period for this proposal, originally set to close on September 8, 1997, has been extended to October 8, 1997. EPA is under a court order, as a result of litigation filed by the Sierra Club, to promulgate the NSPS revisions by September 3, 1998.

The boiler Workgroup at its July 24 and August 19, 1997, meetings discussed the NO_x NSPS proposal, focusing particularly on the industrial-commercial-institutional steam generating units portion of the proposal. Specifically, the Workgroup discussed whether or not the industrial-commercial-institutional portion of the proposal should be withdrawn from the proposal as written and be included within the ICCR process. The Workgroup acknowledged that because there is no process for electric utility steam generating units similar to the ICCR for industrial sources, that promulgation of utility NO_x NSPS revisions need to proceed as scheduled.

Because the Workgroup did not reach a consensus decision regarding whether or not the industrial-commercial-institutional steam generating units portion of the proposal should be withdrawn from the proposal and included within the ICCR process, the Workgroup offers the following differing perspectives.

Workgroup members who believe that the industrial-commercial-institutional steam generating units portion of the proposal should not be withdrawn from the proposal and included within the ICCR stated the following.

- The NO_x NSPS is an ongoing project with a court ordered schedule for promulgation.

- EPA should be praised for its output-based format which promotes energy efficiency and pollution prevention.

- Given the Workgroup's need to make significant progress on MACT standards, the Workgroup should not focus on the NO_x NSPS.

Workgroup members who believe that the industrial-commercial-institutional steam generating units portion of the proposal should be withdrawn from the proposal and included within the ICCR stated the following.

- Since the ICR process is in place and a tremendous amount of participants time, effort, and cost is involved in the ICCR process, it is believed that the court should recognize that inclusion of the NO_x NSPS within the ICCR process is a legitimate method of resolving any changes to the NSPS.

- One of the initial overall purposes of the ICCR was to prevent overlap, conflict, and staggered implementation of rules for combustion source emissions control. Since the ICCR process is intended to look at HAPs and coincident criteria pollutant emissions resulting from different control techniques and provide coordinated control methodology and timing, promulgating a revised NSPS for industrial boilers at this time undercuts the purpose and effectiveness of the ICCR process.

- Some provisions of the NO_X NSPS could conflict with the ICCR development methodology (for example, definition differences), causing extra effort in the ICCR to account for those differences and/or recommend later changes to the NSPS. Such a result would cause added effort and cost to all participants in the process as well as to the EPA and State and local regulatory agencies.

- Since the purpose of the ICCR process was to provide a coherent and consistent set of emissions control rules to the regulated community, promulgation of the NO_x NSPS as

proposed would result in an inconsistent result due to emissions control requirements which could potentially conflict with HAP emissions (increase HAP emissions by NO_x controls) and HAP control requirements. That result, while possibly remote, would present an obstacle to the efficient culmination of the ICCR process.

- An additional impact of promulgation of the NO_x NSPS as proposed would be the requirement for new sources to install high cost control equipment only to possibly need to retrofit additional emissions control equipment as a result of the ICCR process. Such a result would be a direct conflict that the ICCR process was intended to prevent.

- EPA has undoubtedly completed a significant amount of background work for the NSPS proposal. Some of this material should be useful for development of the ICCR. To the extent that there are conflicts in methodology between these EPA efforts and the ICCR process, those should be resolved within the same overall process, rather than by the ICCR possibly needing to justify differences with past rulemakings. Since the timing of this proposal with the ICCR overlaps, NSPS considerations can reasonably be included in the ICCR.

Boiler Workgroup Request of the ICCR Coordinating Committee

While the Boiler Workgroup could not reach consensus about whether or not the industrial-commercial-institutional steam generating units portion of the proposal should be withdrawn from the proposal and included within the ICCR, the Boiler Workgroup members did agree that the various opinions and positions of Workgroup members should be presented to the Coordinating Committee.

The Boiler Workgroup believes it is highly unlikely that the Coordinating Committee will reach consensus about whether or not the industrial-commercial-institutional steam generating units portion of the proposal should be withdrawn because several Boiler Workgroup members who hold different perspectives about this issue are also Coordinating Committee members.

Because it is unlikely that the Coordinating Committee will reach consensus, the Boiler Workgroup requests that, after discussion of the points presented above and after addition of any other prospectives offered by Coordinating Committee, the various perspectives of the Workgroup and Coordinating Committee members be forwarded to EPA. this could be accomplished via the ICCR

Federal Advisory Committee (the Coordinating Committee), by submitting written comments to EPA before the end of the public comment period, or both.

Attachment 9

EMISSION DATA ON COMBUSTORS PRESENTED BY DAVID MARRACK

KCH. Hillingdon & EU Limit

11% O_2, O°C, 1 Atm Dry Gas

	MWI	EU TE
PCDD/PCDF	0.006ng/m^3 †	0.1 NATO 0.14 EPA 7% O_2
CO	<1.5 mg/m^3	50
PM	3.3 mg/m^3	10
Hg	0.7 µg/m^3	50
Pb	8.3 µg/m^3	---

† EPA Method or Detection Limit

Attachment 10

ENVIRONMENTAL CAUCUS PRESENTATION

Environmental Justice and ICCR

What is environmental justice, and why is environmental justice relevant to ICCR?

The Agency Definition of Environmental Justice

According to U.S. EPA, environmental justice means:
* the fair treatment of people of all races, cultures and incomes with respect to the development, implementation and enforcement of environmental laws, regulations, programs and policies;

* that no racial, ethnic or socioeconomic group should bear a disproportionate share of the negative environmental consequences resulting from the operation of industrial, municipal and commercial enterprises and from the execution of federal, state and local programs and policies; and,

* that communities, private industries, local governments, states, tribes, federal government, grass roots organizations and individuals act responsibly and ensure environmental protection to all communities. See 58 Fed. Reg. 63955, 63957 (December 3, 1993).

Why is environmental justice relevant to ICCR?

Environmental justice is relevant to all U.S. EPA activities by virtue of Executive Order and well-established Agency policy. In addition, there are specific mandates in the Clean Air Act, including provisions of Section 129 now before the ICCR, which are relevant to environmental justice issues. To the extent U.S. EPA will delegate its responsibilities for implementation and enforcement of combustion emission standards to its State partners, it is authorized to impose and enforce requirements to ensure non-discrimination. Finally, it is anticipated the Agency will issue definitive guidance on the legal requirements arising from its commitment to environmental justice in the near future.

Executive Order 12898

President Clinton signed Executive Order No. 12898, Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations, on February 11, 1994. 59 Fed. Reg. 7629 (Feb. 16, 1994).

Executive Order No. 12898 does not create a new legal remedy. Reno, Janet. "Department of Justice Guidance Concerning Environmental Justice" (January 9, 1995), p. 2. As an internal management tool of the Executive Branch, the Order directs Federal agencies to put into place procedures and take actions to make achieving environmental justice part of their basic mission. Id.

President Clinton explained that Federal agencies have the responsibility to promote "nondiscrimination in Federal programs substantially affecting human health and the environment." Id. Accordingly, agencies must implement actions to identify and address disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority and low-income populations and federally-recognized Indian tribes. Id.

In a memorandum issued contemporaneously with the Order, the President "underscored certain provisions of existing law that can help ensure that all communities and persons across the Nation live in a safe and healthful environment". Id. For example, the Presidential memorandum emphasizes that Title VI of the Civil Rights Act of 1964 provides an opportunity for Federal agencies to address environmental hazards in minority communities and low-income communities. This purpose is accomplished by ensuring compliance with the existing non-discrimination provisions in Federal contracts with State agency partners.

U.S. EPA Policy

U.S. EPA has two overarching goals in relationship to environmental justice. U.S. Environmental Protection Agency, Draft Environmental Justice Strategy for Executive Order 12898 (January, 1995). U.S. EPA's first goal is to ensure that no segment of the population, regardless of race, color, national origin, or income, suffers disproportionately from adverse human health or environmental effects as a result of EPA's policies, programs, and activities Id. "Introduction" by Carol M. Browner.

U.S. EPA's second overarching goal is to ensure that those who must live with environmental decisions - community residents, environmental groups, State, Tribal and local governments, businesses - must have every opportunity for public participation in the making of those decisions. Id. An informed and involved local community is regarded as a necessary and integral part of the process to protect the environment. Id.

Environmental Justice and the Clean Air Act

The connections between the Clean Air Act and environmental justice were first described U.S. EPA during the Bush Administration in a report entitled Environmental Equity - Reducing Risk For All Communities, EPA230-R-92-008, June 1992. Among the primary factual conclusions of this report is that racial minorities, who live in urban areas in higher percentages than their white counterparts, disproportionately experience the consequences of higher air pollution found in urban settings.

The Environmental Equity report concludes:

> *The literature available suggests that exposure, siting, sensitivity, and the distribution of air pollutants raise concerns about equity with respect to air pollution. Available studies do not demonstrate (or even raise the suggestion) that OAR's policies have resulted in differential allocations of environmental benefits. However, the literature examined suggests that racial minority and low-income populations have experienced poorer air quality because they tend to live in urban areas and have in some cases lived in close proximity to air polluting facilities. Also, in some cases, they may be more sensitive to certain air pollutants than the general population.*

In considering this conclusion in light of OAR's opportunities under the 1990 Clean Air Act Amendments, the report observes:

> *To the extent urban air quality is improved via the Act, minority populations will experience higher relative benefits than the general population because of their high representation in urban areas.*

In discussing the effects of regulatory action mandated under the 1990 amendments, the report concludes:

> *The reductions in exposure and associated control costs will in general be distributed widely. However, several*

of the changes enacted could potentially have greater economic impacts on low-income people than on middle- or high-income groups...Once again, opportunities exist for EPA to include consideration of those racial minority and low-income communities who are at greatest risk than the population as a whole in development of this guidance.

Environmental Justice and ICCR

The focus of the Air Division's environmental justice opportunities has been in rule development under the Clean Air Act of 1990. These opportunities include considering environmental justice in NSR and PSD permitting, improving public participation under Title V, establishing siting standards for incinerators under Section 129, revising ambient air quality standards, and incorporating environmental justice into research and regulation of hazardous air pollutants. There are four opportunities which are specifically important for ICCR.

First, Section 129 (a)(3) requires siting requirements for new solid waste burning units which "minimize, on a site specific basis, to the maximum extent practicable, potential risks to public health or the environment." ICCR provides a clear opportunity for rulemaking on this requirement, including the identification of factors and procedures (including enhanced public participation) which must be used in the characterization of risk minimization.

Second, there are opportunities under Sections 112, 129 and 501 to enhance public participation in the permitting of combustors. These opportunities are separately described in a companion background paper entitled Public Participation and ICCR.

Third, because U.S. EPA is authorized to, and anticipates, delegating implementation of combustor rules to States (see 112(l), and, 129(b)(2)), rules developed through ICCR could include terms designed to address disproportionate impact and public participation in subsequent state activities. The Administrator could also independently include these terms in delegation agreements.

Fourth, pursuant to Title VI of the Civil Rights Act of 1964, U.S. EPA must ensure that programs or activities receiving EPA financial assistance that affect human health or the environment do not directly, or through contractual or other arrangements, use criteria, methods, or practices that have a discriminatory effect on the basis of race, color or national origin. Memorandum from Jean C. Nelson, General Counsel, to Carol Browner, Administrator, March

17, 1994. As a practical matter, this requires U.S. EPA to enforce a standard provision in its grant agreements with its State-funded partners, in which States agree they -

> *6. Will comply with all Federal statutes relating to non-discrimination. These include but are not limited to: (a) Title VI of the Civil Rights Act of 1964 (P.L. 88-352)...*

ICCR does not have a mandate related to Title VI. However, two provisions which are directly relevant to ICCR provide a basis for further defining how States can conduct their federally-funded, federally-delegated activities so as to avoid violating non-discrimination requirements.

Section 112(l) indicates that States may develop and submit programs for the implementation and enforcement of standards established pursuant to Section 112. For her part, the Administrator is required to publish guidance which establishes the criteria through which States can develop and seek approval for these programs. It may be possible for the Administrator to establish environmental justice requirements under Section 112 as part of the delegation of this program to States. The Administrator could use this authority to promulgate requirements which will ensure States are exercising their authority consistently with Title VI and environmental justice.

Section 129(b)(2) indicates that States in which solid waste burning facilities are operating shall submit to the Administrator a plan to implement and enforce Section 129 guidelines. The Administrator is given broad discretion over the approval or disapproval of these mandatory State plans (*See* 40 CRF Part 60, Subpart B, for an example of this process which includes mandatory public participation in the development of a state plan). The standards for approval for new sources must include factors unique to Section 129(a)(3): a determination of methods and technologies for removal or destruction of pollutants before, during and after combustion; and, siting requirements that minimize "to the maximum extent practicable" potential risks to human health and the environment. These unique requirements suggest the Administrator should incorporate guidance on Title VI and environmental justice into the review and approval of state plans to implement and enforce 129(a)(3).

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Why is environmental justice relevant to ICCR?

Environmental justice is relevant to all U.S. EPA activities by virtue of Executive Order and well-established Agency policy. In addition, there are specific mandates in the Clean Air Act, including provisions of Section 129 now before the ICCR, which are relevant to environmental justice issues. To the extent U.S. EPA will delegate its responsibilities for implementation and enforcement of combustion emission standards to its State partners, it is authorized to impose and enforce requirements to ensure non-discrimination. Finally, it is anticipated the Agency will issue definitive guidance on the legal requirements arising from its commitment to environmental justice in the near future.

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Environmental Justice and ICCR

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First, Section 129 (a)(3) requires siting requirements for new solid waste burning units which "minimize, on a site specific basis, to the maximum extent practicable, potential risks to public health or the environment." ICCR provides a clear opportunity for rulemaking on this requirement, including the identification of factors and procedures (including enhanced public participation) which must be used in the characterization of risk minimization.

Second, there are opportunities under Sections 112, 129 and 501 to enhance public participation in the permitting of combustors. These opportunities are separately described in a companion background paper entitled Public Participation and ICCR.

Third, because U.S. EPA is authorized to, and anticipates, delegating implementation of combustor rules to States (see 112(l), and, 129(b)(2)), rules developed through ICCR could include terms designed to address disproportionate impact and public participation in subsequent state activities. The Administrator could also independently include these terms in delegation agreements.

Fourth, pursuant to Title VI of the Civil Rights Act of 1964, U.S. EPA must ensure that programs or activities receiving EPA financial assistance that affect human health or the environment do not directly, or through contractual or other arrangements, use criteria, methods, or practices that have a discriminatory effect on the basis of race, color or national origin. Memorandum from Jean C. Nelson, General Counsel, to Carol Browner, Administrator, March 17, 1994. As a practical matter, this requires U.S. EPA to enforce a standard provision in its grant agreements with its State-funded partners, in which States agree they -

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ICCR does not have a mandate related to Title VI. However, two provisions which are directly relevant to ICCR provide a basis for further defining how States can conduct their federally-funded, federally-delegated activities so as to avoid violating non-discrimination requirements.

Section 112(l) indicates that States may develop and submit programs for the implementation and enforcement of standards established pursuant to Section 112. For her part, the Administrator is required to publish guidance which establishes the criteria through which States can develop and seek approval for these programs. It may be possible for the Administrator to establish environmental justice requirements under Section 112 as part of the delegation of this program to States. The Administrator could use this authority to promulgate requirements which will ensure States are exercising their authority consistently with Title VI and environmental justice.

Section 129(b)(2) indicates that States in which solid waste burning facilities are operating shall submit to the Administrator a plan to implement and enforce Section 129 guidelines. The Administrator is given broad discretion over the approval or disapproval of these mandatory State plans (*See* 40 CRF Part 60, Subpart B, for an example of this process which includes mandatory public participation in the development of a state plan). The standards for approval for new sources must include factors unique to Section 129(a)(3): a determination of methods and technologies for removal or destruction of pollutants before, during and after combustion; and, siting requirements that minimize "to the maximum extent practicable" potential risks to human health and the environment. These unique requirements suggest the Administrator should incorporate guidance on Title VI and environmental justice into the review and approval of state plans to implement and enforce 129(a)(3).

Pollution Prevention and ICCR

What is the basis for pollution prevention to be incorporated as a primary consideration in ICCR standard-setting?

The general purposes of the Clean Air Act dictate that pollution prevention should be a primary consideration in ICCR's standard setting activities. Section 101(c) of the Clean Air Act states:

A primary goal of this chapter is to encourage or otherwise promote reasonable Federal, State and local government actions, consistent with the provisions of this chapter, for pollution prevention.

Pollution prevention also appears in three of four Congressional purposes for the promulgating the Clean Air Act. CAA Section 101 (b)(2),(3) and (4). For example, Section 101 (b)(4) asserts:

The purposes of this subchapter are...to encourage and assist the development and operation of regional air pollution prevention and control programs.

More specifically, as to new solid waste incinerator units, Section 129(a)(3) requires a consideration of "methods and technologies for removal or destruction of pollutants before, during or after combustion...". The specific measures referenced in Section 112(d)(2) also strongly suggest that pollution prevention measures should be carefully evaluated in standard setting for both new and existing sources. Section 112(d)(2) mandates the use of "measures, processes, methods, systems or techniques", including measures which are designed to:

...reduce the volume of, or eliminate emissions of, such pollutants through process changes, substitution of materials, or other modifications.

These measures are similar to the description of pollution prevention through source reduction found in the Pollution Prevention Act of 1990. In this Act, source reduction is characterized as:

equipment or technology modifications, process or procedure modifications, reformulation or redesign of products, substitution of raw materials, and improvements in housekeeping, maintenance, training or inventory control.

The use of such pollution prevention measures are explicitly endorsed by Congress in the Pollution Prevention Act of 1990:

The Congress hereby declares it to be the national policy of the United States that pollution should be prevented or reduced at the source whenever feasible... 42 U.S.C.A. 13101(b).

Consequently, the use of pollution prevention measures should be directly relevant both to identifying the emissions control achieved by the best controlled similar unit (for new sources), and, the average emissions achieved by the best performing 12 percent of comparable units in any category (for existing sources).
Pollution prevention should be relevant to both the determination of the MACT floor and, eventually, MACT.

What are the key issues related to incorporating pollution prevention measures into ICCR's standard-setting activities?

One issue relevant to pollution prevention in the ICCR process is that the MACT determination is driven by emission comparisons among similar existing sources. Simply, the best controlled sources - the mandated benchmarks for standard-setting - may not be using pollution prevention to achieve their results. That is, if low emissions from the best controlled unit(s) in a category are achieved through end-of-the-pipe technologies, pollution prevention strategies may be overlooked despite their potential economic and environmental merits. Nonetheless, as a practical matter, many sources may eventually be driven to consider pollution prevention to attain the emission standards mandated by this rulemaking.

Another issue relevant to pollution prevention in ICCR is that some readily available pollution prevention practices will be properly characterized as "design, equipment, work practice or operational standards". Section 112(D) allows consideration of these measures in standard-setting, but only if the Administrator determines it is not otherwise feasible to prescribe or enforce an emission standard for control of hazardous air pollutants. *see* CAA Section 112(h). In previous, analogous processes, U.S. EPA has taken the position that an analysis of design, equipment, work practice and operational standards can take place in addition to, but not in lieu of, a consideration of emission standards in the development of regulatory standards.

Finally, a practical issue related to pollution prevention in ICCR is that source workgroups may not assemble sufficient information to demonstrate that the best controlled sources in a category are, in fact, employing pollution prevention. If source work groups are not vigorously seeking to identify pollution prevention practices in their inventorying activities, it will be difficult to promote these measures in subsequent standard-setting discussions.

Public Participation and ICCR

Is there a legal mandate for public participation in the permitting of combustion facilities subject to emission standards under Sections 112 and 129?

Public Participation Under Sections 112 and 129 Will Flow Through Facility Permitting Under Title V of the Clean Air Act

At the conclusion of this rulemaking process, U.S. EPA's final rules will be framed as category-based emission standards. Section 112 and 129 facilities will then be subject to compliance schedules. For example, under Section 112, these schedules should ensure facilities will comply "as expeditiously as practical" with the new regulations, but in no event later than 3 years after the effective date of these standards.

The implementation of the combustor emission standards will flow through the new, federally mandated operating permit program established by the 1990 Clean Air Act, commonly called the Title V Program. That is, regulated facilities will be required to obtain operating permits which demonstrate compliance with the emission standards established through U.S. EPA's rulemaking for combustors.

As a practical matter, in most cases, state agencies have or will have received federal approval for implementing and enforcing Title V. Consequently, state environmental agencies will bear day-to-day responsibility for issuing operating permits which conform with the Section 112 and 129 standards for combustors. Also as result, public participation opportunities will flow through state-approved Title V permitting programs. That is, questions about public participation under Sections 112 and 129 invariably flow into the Title V permitting process because Title V will be the mechanism by which emission standards are implemented on a facility-by-facility basis.

Under Title V, the minimum requirements for public participation include public notice, an opportunity for public comment and a public hearing, and availability to the public of any permit application, compliance plan, permit, and monitoring and compliance report. 42 U.S.C.A. 7661a(b)(6) and 42 U.S.C.A. 7661b(e). A state-approved Title V permitting program must also include "an opportunity for judicial review in State Court of the final permit action by...any person who participated in the public comment process." 42 U.S.C.A. 7661a(b)(6). Within this broad mandate for public participation in the permitting process, each approved State will develop specific implementing programs which must be approved by the U.S. EPA. Consequently, there

will be some state-by-state variations in the opportunities for public participation in the permitting of combustors subject to Section 112 and 129 standards.

Additional Opportunities for Public Participation Under Sections 112 and 129

There is also evidence that Section 112 may, and Section 129 does, mandate additional opportunities for public participation beyond those generically offered under Title V's permitting program.

Section 112(l) indicates that States *may* develop and submit programs for the implementation and enforcement of standards established pursuant to Section 112. For her part, the Administrator is required to publish guidance which establishes the criteria through which States can develop and seek approval for these programs. It may be possible for the Administrator to establish additional public participation requirements under Section 112 as part of the delegation of this program to States.
That is, the Administrator may choose to use this authority to promulgate more expansive public participation opportunities for combustors subject to Section 112 than are generically available under Title V.

Section 129(b)(2) indicates that States in which solid waste burning facilities are operating *shall* submit to the Administrator a plan to implement and enforce Section 129 guidelines. The Administrator is given much broader discretion over the approval or disapproval of these mandatory State plans. Moreover, the standards for approval for new sources must include factors unique to Section 129(a)(3): a determination of methods and technologies for removal or destruction of pollutants before, during and after combustion; and, siting requirements that minimize "to the maximum extent practicable" potential risks to human health and the environment. These unique requirements suggest the Administrator should incorporate much broader concepts of public participation than the generic procedures mandated for other facilities subject to the Title V program.